

# The Wheelchair Handbook

A consumer's guide to seating and mobility equipment

## References

- Arledge, S., Armstrong, W., Babinec, M., Dicianno, B. E., Digiovine, C., Dyson-Hudson, T., ... & Stogner, J. (2011). RESNA Wheelchair Service Provision Guide. RESNA (NJ1).
- Arva, J., Schmeler, M. R., Lange, M. L., Lipka, D. D., & Rosen, L. E. (2009). RESNA position on the application of seat-elevating devices for wheelchair users. *Assistive Technology*, 21(2), 69-72.
- Babinec, M., Cole, E., Crane, B., Dahling, S., Freney, D., Jungbluth-Jermyn, B., & Shea, M. (2013). RESNA position on the application of wheelchairs, seating systems and secondary supports for positioning vs restraint. *Rehabilitation Engineering & Assistive Technology Society of North America*. The RESNA Board of Directors, 21.
- Choukou, M. A., Best, K. L., Potvin-Gilbert, M., Routhier, F., Lettre, J., Gamache, S., ... & Gagnon, D. (2019). Scoping review of propelling aids for manual wheelchairs. *Assistive Technology*.
- The Consortium for Spinal Cord Medicine. (2005). *Preservation of Upper Limb Function Following Spinal Cord Injury: A Clinical Practice Guideline for Health Care Professionals*. Paralyzed Veterans of America.
- Cooper, R. A., Robertson, R. N., Lawrence, B., Heil, T., Albright, S. J., VanSickle, D. P., & Gonzalez, J. (1996). Life-cycle analysis of depot versus rehabilitation manual wheelchairs. *Journal of rehabilitation research and development*, 33, 45-55.
- Cooper, R. A., Gonzalez, J., Lawrence, B., Renschler, A., Boninger, M. L., & VanSickle, D. P. (1997). Performance of selected lightweight wheelchairs on ANSI/RESNA tests. *Archives of physical medicine and rehabilitation*, 78(10), 1138-1144.
- Dicianno, B. E., Morgan, A., Lieberman, J., & Rosen, L. (2016). Rehabilitation Engineering & Assistive Technology Society (RESNA) position on the application of wheelchair standing devices: 2013 current state of the literature. *Assistive Technology*, 28(1), 57-62.
- Dicianno, B. E., Arva, J., Lieberman, J. M., Schmeler, M. R., Souza, A., Phillips, K., ... & Betz, K. L. (2009). RESNA position on the application of tilt, recline, and elevating legrests for wheelchairs. *Assistive Technology*, 21(1), 13-22.
- Dieruf, K., Ewer, L., & Boninger, D. (2008). The natural-fit handrim: factors related to improvement in symptoms and function in wheelchair users. *The journal of spinal cord medicine*, 31(5), 578-585.
- DiGiovine, C., Rosen, L., Berner, T., Betz, K., Roesler, T., & Schmeler, M. (2012). RESNA Position on the Application of Ultralight Manual Wheelchairs, *Rehabilitation Engineering & Assistive Technology Society of North America*.
- European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. Emily Haesler (Ed.) EPUAP/NPIAP/PPPIA: 2019.
- Gebrosky, B., Grindle, G., Cooper, R., & Cooper, R. (2020). Comparison of carbon fibre and aluminium materials in the construction of ultralight wheelchairs. *Disability and Rehabilitation: Assistive Technology*, 15(4), 432-441.
- Janeček, M., Nový, F., Harcuba, P., Stráský, J., Trško, L., Mhaede, M., & Wagner, L. (2015). The Very High Cycle Fatigue Behaviour of Ti-6Al-4V Alloy. *Acta Physica Polonica A*, 128(4).

Kreutz, D. (2018). Postural Support and Pressure Management Considerations for Hands-Free Sitters. In: Lange, M.L., Minkel, J.L. (eds). Seating and Wheeled Mobility: A Clinical Resource Guide. Slack Incorporated. 49-59.

Levy A., Shoham N., Kopplin K., Gefen A. (2018) The Critical Characteristics of a Good Wheelchair Cushion. In: Romanelli M., Clark M., Gefen A., Ciprandi G. (eds) Science and Practice of Pressure Ulcer Management. Springer, London. [https://doi.org/10.1007/978-1-4471-7413-4\\_2](https://doi.org/10.1007/978-1-4471-7413-4_2)

Rehabilitation: Assistive Technology, 16(2), 152-159.

Report SP-2018-Pitt-02, University of Pittsburgh, Tissue Integrity Management Laboratory

Report SP-2018-Pitt-09, University of Pittsburgh, Tissue Integrity Management Laboratory (2)

Rosen, L. (2018). Manual Mobility Applications for the Person Able to Self-Propel. In: Lange, M.L., Minkel.J.L.(eds). Seating and Wheeled Mobility: A Clinical Resource Guide. Slack I<sup>\*</sup>norporated. 149-163.

Rosen, L., Arva, J., Furumasu, J., Harris, M., Lange, M. L., McCarthy, E., ... & Wonsettler, T. (2009). RESNA position on the application of power wheelchairs for pediatric users. Assistive Technology, 21(4), 218-226.

Rice, L. A., Yarnot, R., Mills, S., & Sonsoff, J. (2021). A pilot investigation of anterior tilt use among power wheelchair users. Disability and

Sabari, J., Shea, M., Chen, L., Laurenceau, A., & Leung, E. (2016). Impact of wheelchair seat height on neck and shoulder range of motion during functional task performance. Assistive Technology, 28(3), 183-189.

Sakakibara, B. M., Miller, W. C., Souza, M., Nikolova, V., & Best, K. L. (2013). Wheelchair skills training to improve confidence with using a manual wheelchair among older adults: a pilot study. Archives of physical medicine and rehabilitation, 94(6), 1031-1037.

Sonenblum, S. E., Maurer, C. L., Hanes, C. D., Piriano, J., & Sprigle, S. H. (2019). Everyday use of power adjustable seat height (PASH) systems. Assistive Technology, 1-9

Sprigle, S., Maurer, C., & Sorenblum, S. E. (2010). Load redistribution in variable position wheelchairs in people with spinal cord injury. The Journal of Spinal Cord Medicine, 33(1), 58-64.

Systematic review and clinical recommendations for dosage of supported home-based standing programs for adults with stroke, spinal cord injury and other neurological conditions (Paleg and Livingstone BMC Musculoskeletal Disorders (2015) 16:358 DOI 10.1186/s12891-015-0813-x)

Ukita A, Abe M, Kishigami H, Hatta T. (2020). Influence of back support shape in wheelchairs offering pelvic support on asymmetrical sitting posture and pressure points during reaching tasks in stroke patients. PLoS ONE 15(4): e0231860. <https://doi.org/10.1371/journal.pone.0231860>

Van Breukelen, K., & LES, L. E. De ergonomische zit. Accessed 06.11.2021 <https://dwarslaesie.nl/wp-content/uploads/2016/09/De-ergonomische-zit-Kees-van-Breukelen.pdf>