

# Manual Wheelchair Skills: Navigating Curbs Independently

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## Fact Sheet

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## *Independent Performance of Wheelchair & Curb Management*

Prior to independent navigation of curbs, individuals must be skilled in advanced techniques. An individual must be skilled in performing wheelies to independently negotiate curbs when ramps are not present.<sup>1</sup>

### **Ascend Curb with Momentum<sup>2</sup>**

1. Approach the curb with speed.
2. Just prior to reaching the curb, perform a pop-up by quickly and forcefully pulling the pushrims forward. This will allow the casters to pop up onto the curb.
3. With the trunk leaning forward, place the hands on the back of the handrims and forcefully pull forward to get the drive wheels up onto the curb.



Figure 1. Independently ascending curb forward.

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## Descend Curb in Wheelie<sup>2</sup>

1. Prior to reaching the curb, pop up into a wheelie. While maintaining the wheelie slowly approach the curb.
2. Maintain the wheelie and let the handrims slowly glide through your hands to control the descent.



Figure 2. Independently descending curb backward.

### Key Points<sup>3</sup>:

- Training of independent curb management should begin on small curbs (approximately 1 inch) and slowly progress.
- To ensure safety, close guarding of the individual is necessary while they practice and learn to independently manage curbs.
- Begin practice on level sidewalks and as progression is made, move to more challenging terrain.

The following video provided by the University of Washington gives a demonstration of the above instructions.<sup>4</sup> Follow the link:

<https://youtu.be/PPVXkbZoe1k>

### References:

1. Dutton M. Patient Transfers and Mobility. In: Dutton M. eds. *Introduction to Physical Therapy and Patient Skills*. New York, NY: McGraw-Hill; 2014.  
<https://accessphysiotherapy.mhmedical.com/content.aspx?sectionid=86198760&bookid=1472&jumpsectionID=86198938&Resultclick=2#1110273214>. Accessed October 9, 2018.
2. RehabTeamSite. Functional rehabilitation: Wheelchair skills, wheelchair propulsion, over obstacles, curbs.  
<https://calder.med.miami.edu/providers/PHYSICAL/wheelcurb.html>. Accessed September 23, 2018.
3. Somers MF. *Spinal Cord Injury: Functional Rehabilitation*. 2<sup>nd</sup> ed. Upper Saddle River, N.J.: Prentice Hall; 2001.
4. University of Washington-Rehabilitation Medicine. Foundational wheelchair techniques. <http://sci.washington.edu/empowerment/videos.asp#wc>. Accessed September 22, 2018.