# Safer bathrooms, Safer bathing

Getting a grasp on grab bars

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For more information about this infographic or to learn about our research on bathroom safety, please contact: **Dr. Alison Novak**, <a href="mailto:alison.novak@uhn.ca">alison.novak@uhn.ca</a>



81% of people who are admitted to the ER with bathroom related injuries are under the age of 65. People of all ages are at risk of falling in bathrooms.<sup>1</sup>



Based on laboratory research, having a grab bar in your bathroom "just in case" can reduce your chance of falling in the bathtub by up to 75% following a slip or balance loss.<sup>2</sup>



You are 2.4 times more likely to be injured falling in a bathroom than in any other part of your home.<sup>3</sup>

Movements made while bathing can be challenging for all ages, especially when the ground is slippery. Grab bars help keep your balance while you bend, turn and twist.

> Grab bars are an effective fall prevention tool

# Comparing types of Grab bars

## PERMANENT

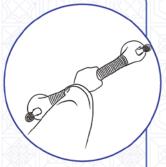
Are installed directly to the wall of your bathroom, mounted securely to a stud or solid backing.



- ✓ Shown to reduce fall risk in lab studies
- Can be securely installed to a stud or solid backing
- Available in longer lengths with a variety of textures and colours
- X May have a higher upfront cost

## **TEMPORARY**

Can be mounted using suction cups or clamps to your tile wall or bathtub rim.



- ✓ Easy to install by most people
- Useful for travelling or when permanent installation is not possible
  - May not be safe or effective in all bathrooms
- X Typically short in length
- It can be challenging to know if you have installed it correctly

## How to select a grab bar for your bathroom

#### Your grab bar should be:



At least 900mm (36") long



About 32 to 35mm (1.25-1.5") in diameter<sup>6</sup>



Rubberized or have a texturized coating for a more comfortable and secure grip



Able to support 300lbs of applied force from body weight

## Installing a wall-mounted permanent grab bar

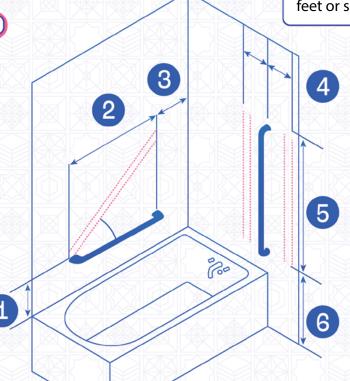
1

Install a vertical grab bar at the rim of your bathtub or shower to help you get in and out. 2

Install a horizontal, angled or L-shaped bar along the back wall of your bathtub or shower to help keep your balance while completing challenging tasks like leaning over to wash your feet or sitting on a bath seat.

3

A "universal" grab bar installation is shown in the figure below and will meet the needs of most people for safer bathing. Consulting with an Occupational Therapist is helpful if you have specific bathing support requirements that are not met by a universal grab bar configuration.



- 1. For a horizontal or diagonal grab on the back wall, install 180 to 280 mm above bathrub rim.
- 2. Be sure your grab bar is at least 900mm (36") long.
- 3. Install the grab bar on the back wall 300mm from the control end of the bathtub.
- 4. For a vertical grab bar, install at the entry of the tub or shower, within 225 to 300mm of bathtub rim.
- 5. Be sure your grab bar is at least 900mm (36" long.
- 6. Install a vertical grab bar 600mm above finished floor or at = height of the bathtub rim for higher bathtubs.

#### References

- . Schellenberg et al. (2018) J Surg Res
- 2. Levine et al. (2021) Hum Factors
- 3. Stevens et al. (2014) Inj Epidemiol
- 4. De-Rosende-Celeiro et al. (2019) Plos One
- 5. King & Novak (2017) Am J Occup Ther
- 6. Gosine et al. (2021) J Biomech

#### Other Resources

- . EnABL Research:
- https://www.enablresearch.com
- Federal Home Accessibility Credit: https://bit.ly/3ne9Zmb
- March of Dimes Canada: https://bit.ly/3DL0Cks Programme
- D'Adaption de Domicile: https://bit.ly/3ARUd55
- CAOT Find an OT: https://caot.ca/site/findot





