



etac[®]

Clinical benefits

Shower chairs, stools, seats and bath boards



Introduction

Falls and the injuries they cause are extremely common, leading to personal suffering and rising healthcare costs globally. Fortunately, many falls are preventable. One effective strategy to reduce the risk of falls is the installation of assistive devices, such as shower seats or grab rails, in bathrooms. These devices help shorten the time spent standing in the shower, significantly aiding fall prevention.

This paper presents our perspective on fall prevention, highlighting the importance of bathroom assistive devices and their clinical benefits.

We discuss:

- The impact and consequences of falls
- Increasing risks with ageing
- The bathroom – a high-risk area
- Strategies for fall prevention
- Clinical benefits of our shower chairs, stools, seats, and bath boards
- Conclusion

The impact and consequences of falls

Falls are the second leading cause of unintentional injury—related deaths worldwide. Each year, an estimated 684,000 individuals die from falls globally, of which over 80% are in low- and middle income countries. Each year, 37.3 million falls that are severe enough to require medical attention occur. The financial costs of fall related injuries are substantial. For people aged 65 years or older, the average health system cost per fall injury Finland and Australia is US\$ 3611 and US\$ 1049, respectively.¹

Increasing risks with ageing

Age is one of the critical risk factors for falls. The World Health Organization reports that around 28–35% of individuals aged 65 and above experience falls annually, with this risk rising to 32–42% for those over 70⁴. Older adults have the highest risk of death or serious injury arising from a fall. For example, in the United States, 20–30% of older people who fall suffer moderate to severe injuries such as bruises, hip fractures, or head trauma. This risk level may be partly due to physical, sensory, and cognitive changes associated with ageing, and environments that are not adapted for an ageing population.¹



"Globally, falls are a major public health problem. [...] In all regions of the world, death rates are highest among adults over the age of 60 years."

– WHO, Falls, 2021

The bathroom — a high-risk area

Most falls occur at home, up to 80% in the bathroom. Recent research indicates that falls account for about 60% of all injury related emergency room visits among individuals aged 65 and older.

Contributing factors include slippery floors, wet surfaces, and limited space, which make falls in the bathroom more likely to result in injuries from hard floors or fixtures. With our global population ageing, bathroom safety is becoming an increasingly critical healthcare issue.

However, the bathroom is frequently identified as a common site for household environmental hazards. Among community-dwelling seniors, 5–7% require assistance with bathing, highlighting the need to view the bathroom not merely as a potential hazard but as an opportunity to empower individuals.²

Improving bathroom safety can help older adults maintain their independence and dignity during daily routines by reducing the need for assistance with personal care tasks. With secure and reliable aids like shower chairs, stools, and bath boards, individuals can manage bathing activities more confidently, which lowers the risk of falls and injuries.

This not only reduces the financial costs associated with caregiver support or medical interventions but also helps preserve the individual's sense of autonomy and privacy. Empowering older adults to handle personal hygiene safely enhances their quality of life and allows them to maintain control over an essential aspect of their daily living.



Strategies for fall prevention

Prevention strategies should focus on education and training, creating safer environments, prioritising fall-related research and establishing effective policies to reduce risk.¹

Integrating assistive technologies into bathroom design is a proactive approach to patient-centred care. Studies such as Murphy (2007) and Mann (1996) strongly support the use of bath devices to enhance safety and comfort for older adults.^{2,3}

Assistive devices like shower chairs and bath boards are more than just safety tools; they are enablers of independence and quality of life. The WHO's Global Report on Assistive Technology highlights the difference that quality assistive technology can make, particularly in maintaining independence and enabling participation in daily activities.⁵ These devices are at the forefront of this movement, offering practical solutions to complex challenges.

Etac's contribution to fall prevention

Slippery floors, wet surfaces, and limited space increase the risk of falls in the bathroom. To tackle these challenges, we offer a range of stable and user-friendly bathroom aids that combine function and style. Our products seamlessly blend into the bathroom environment, making them more appealing and easier for users to accept.

We provide solutions for both showering and bathing that are based on our knowledge of users' diverse hygiene routines. Our height-adjustable seats and chairs offer reliable support for those taking showers, helping to reduce standing time. For bath users, durable and ergonomic bath boards provide a safe and comfortable way to transition in and out of the tub. The boards are securely positioned across the width of the bathtub, offering a stable surface for users to sit on while easily sliding into or out of the bath. Additionally, strategically placed grab rails support standing and moving in and out of the shower or bath.

We prioritise functionality, design and safety in our products. All our bathroom aids comply with medical device regulations, ensuring reliability and effectiveness. Using durable, high-quality materials, we create long-lasting products that reduce waste, deliver long-term value, and promote a more sustainable approach to developing assistive aids.



Our aids are medical devices

Intended purpose

The shower chairs, stools, seats, and bath boards are medical devices intended for alleviation of or compensation for a functional impairment due to an injury or disability. The devices are designed to facilitate personal hygiene and provide stability and support in the shower or the bathtub.

Intended user

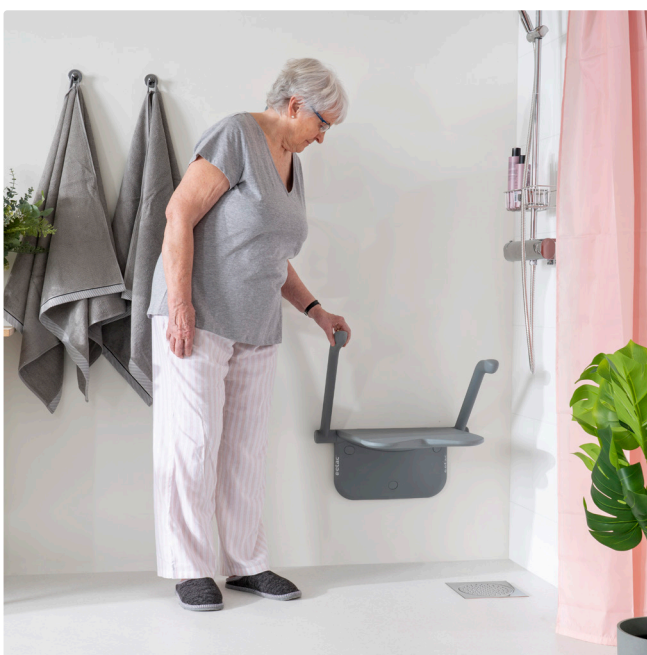
The intended user group for the devices is based on functional ability and not on a specific diagnosis, health condition or age. The devices are primarily intended for adults.

Intended environment

The devices are designed for indoor use and are suitable for homes and institutional bathrooms. They are not designed for use in swimming pools or similarly corrosive environments.

Clinical benefits:

- **Falls prevention:** a safe bathroom reduces the risk of falls accidents and related injuries.
- **Promotion of self-reliant hygiene:** facilitates independent hygiene routines.
- **Enhanced user independence:** enables individuals to maintain autonomy.
- **Simplifies daily activities:** make everyday routines easier to manage.



Conclusion

Our shower chairs, stools, seats, and bath boards offer clinical benefits beyond accident prevention. They enable users to maintain their hygiene routines autonomously, restoring a sense of independence often lost when individuals become dependent on assistance for basic daily tasks. By promoting self-reliant personal care, they can significantly reduce the psychological impact associated with loss of independence.

As we look ahead, it is essential to continue promoting the broader use of assistive bathroom aids, not just as a response to fall risks but as a standard practice in supporting patient independence. Healthcare providers, policymakers, and designers must work together to create spaces that prioritise safety without compromising dignity and autonomy. It's time to prioritise access to proper assistive technology, which can significantly improve individuals' independence, dignity, safety, and comfort.

Shower chairs, stools, and bath boards are small but important tools that greatly enhance patient care. By integrating them into healthcare design and patient care protocols, we can drive change that improves lives today and sets a higher standard for the future.

References:

1. WHO, 2021. Falls. <https://www.who.int/news-room/fact-sheets/detail/falls>
2. Murphy S L. The bath environment, the bathing task, and the older adult: A review and future directions for bathing disability research. *Disability and Rehabilitation*, 2007.
3. Mann W C. Use of Assistive Devices for Bathing by Elderly Who Are Not Institutionalized. *The Occupational Therapy Journal of Research*, 1996
4. WHO. Global report on falls prevention at older age, 2008.
5. WHO. Global report on assistive technology, 2022.

Etac's bathroom safety solutions for fall prevention

With over 50 years of experience developing assistive devices, Etac is a trusted leader in creating innovative solutions to reduce fall risks and promote independence. Our product range includes shower chairs, stools, seats, and bath boards, all carefully engineered to address the challenges individuals with restricted mobility face during hygiene routines.

Our products are designed to enhance safety, restore confidence, and support dignity in daily activities. Caregivers can also benefit from knowing users are equipped with reliable, high-quality solutions.

Scan the QR code for essential tips on bathroom safety, preventing falls, and recommended solutions for different needs. Learn how they can enhance independence and well-being and create a safer routine.





Etac is a world-leading developer of innovative assistive devices and patient handling equipment. Since 1973, we have been committed to improving quality of life for the individual, family members and caregivers.

For the intended purpose of the products and latest information, please visit www.etac.com

Etac

- +46 371 587 330
- info@etac.se
- www.etac.com

etac[®]
Creating Possibilities