

FallProof™ Balance and Mobility Program

Improving Balance and Mobility Skills For Older Adults At Risk for Falls



The national award-winning FallProof™ Balance and Mobility program utilizes a multidimensional approach to the assessment and treatment of balance-related problems. This theory-driven program has proven to be effective in reducing fall risk among older adults identified at moderate-to-high risk for falls. This intensive, evidence-based program was developed by Debra J. Rose, Ph.D, the Director of the Center for Successful Aging at California State University, Fullerton and a Professor in the Division of Kinesiology and Health Science. Dr. Rose has considerable experience working with older adults with balance and mobility impairments. She has published widely in the areas of motor control and balance research, and is a frequent speaker in the areas of fall-risk reduction, balance and mobility. Dr. Rose is the author of FallProof!™: A Comprehensive Balance and Mobility Training Program, 2nd edition.

The efficacy of the program was first demonstrated in 2000 in a laboratory setting via a small, randomized controlled study. It was then translated into a group-based program that was implemented in 18 senior centers in Orange County, California as part of a funded three-year feasibility study to determine whether this type of program could be successfully implemented and sustained in the community. The study demonstrated the program's efficacy and overall sustainability by showing that participants had significant improvements in measures of sensory integration and reception, balance, lower body strength, functional mobility, and balance-related self-confidence.

The overarching goal of the group-based FallProof™ Balance and Mobility program is to promote functional independence by ameliorating or modifying the risk factors that contribute to heightened fall risk among "at risk" and physically frail older adults. To accomplish this goal, the program includes a carefully selected battery of tests that are used to identify functional limitations emerging from impairments in one or more of the systems involved in the control of balance and mobility. The program content is designed to systematically manipulate the demands of the task to be performed and/or the constraints imposed by the practice environment in a way that matches each individual's capabilities. An important objective of the program is to challenge, but not exceed, the individual's intrinsic capabilities by systematically introducing balance and mobility tasks of increasing complexity that are to be performed in a variety of practice environments that simulate those encountered during daily life. The program content focuses on elevating the function of the sensory, motor, and cognitive systems through four core program components: 1) volitional and non-volitional control of the center of gravity, 2) sensory reception and integration skills, 3) selection and scaling of postural control strategies, and 4) development of a flexible and adaptable gait pattern. Upper and lower body strength, flexibility and endurance are systematically incorporated into the program, often in combination with the balance and mobility activities presented in the four components.

The fidelity of the program has been maintained by implementing an instructor certification course, standardizing program content and delivery, standardizing lesson plans, and standardizing the assessment of the program's effectiveness. FallProof™ Certified Balance and Mobility Specialist instructors complete a rigorous four-month

certification program, combining approximately 100 hours of online coursework with a three-day practical competency workshop and examination. Instructors learn to correctly administer and interpret the results of the appropriate multidimensional assessment tests for each class participant, understand the various body systems that contribute to balance and mobility and the common age-related changes occurring in each of these systems. Through the structured, progressive class formats and lesson plans, instructors address with class participants, both the internal and external risk factors known to be strongly associated with increased incidence of falls.

The FallProof™ classes provide a structured and progressive program of activities specifically designed to address the multiple dimensions that contribute to balance and mobility, and to target the important intrinsic risk factors associated with increased fall risk. The program is structured to be taught as 60-minute classes, two times per week. It was originally developed with progressive activities over a twelve-week period, but has been expanded to 24-weeks based on recent research indicating that a minimum of 50 hours of targeted balance and mobility training is needed before fall incidence rates are positively influenced. It is recommended that class enrollments are capped around 12 participants to create an environment that is appropriately challenging, yet safe for all participants. Many participants continue in the classes on an ongoing basis to maintain or continue to improve the benefits they gain from participating in the program. An individualized approach for each client is made possible in the FallProof™ program by manipulating the level of challenge associated with each set of progressions presented to the group. Integral to being able to appropriately challenge each client is the instructor's ability to correctly interpret the results of each test conducted with each client prior to the start of the program. Clients participate in the progressive and culminating activities that were designed for each of the four program components and which are intended to simulate the same types of balance challenges encountered in daily life. An important skill that FallProof™ instructors are taught is how to demonstrate to clients the functional relevance of each activity presented.

The FallProof™ Balance and Mobility program continues to evolve as new research findings emerge and the program expands into new settings, such as assisted living and adult day healthcare settings. Since 2003, hundreds of instructors have been certified and are instructing FallProof™ in group-based classes and one-to-one in community settings, older adult residential communities, university and clinical settings throughout the United States and Canada.

Additionally, a DVD-based progressive home exercise program comprised of three levels has been developed to supplement the group classes and increase the programming dose received or to provide an option for those individuals unable to participate in a FallProof™ group class. The FallProof™ At Home DVDs include progressive exercises excerpted from the FallProof™ Balance and Mobility program, and they may help individuals rebuild balance and strength, fine tune flexibility, lower risk for falls, and regain independence.



To learn more about the FallProof™ Balance and Mobility program, to see a list of FallProof™ classes offered in the community, or to order the FallProof™ At Home DVDs, please visit the California State University, Fullerton, Center for Successful Aging website at <http://hhd.fullerton.edu/csa/>, e-mail fallproof@fullerton.edu, or phone 657-278-8043.



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