

# Exercise programs for falls prevention in Winnipeg

## Project aim:

To create an inventory of community-based exercise programs that meet the recommended physical activity guidelines for falls prevention to be used 1) by healthcare professionals, elderly individuals and their families to locate exercise programs in the community; and 2) to identify gaps in community-based exercise programs that meet the criteria for falls prevention.

## Methods:

Community Centres, Seniors' Centres, and City of Winnipeg, fitness and healthcare facilities and organizations were contacted to determine if they run exercise programs for older adults. Exercise programs were considered appropriate for falls prevention if they met the following criteria:

1. At least 40% of the program is spent doing standing exercises that challenge balance and/or strength.
2. The program is designed and supervised by a trained healthcare or exercise professional or instructor.

Nursing students working with IMPACT also conducted focus groups with older adults in Seven Oaks, St. James and Point Douglas to gather information about exercise participation.

## Findings:

A total of 114 exercise programs (59 general exercise/strength training, 27 Tai Chi, 20 dance, 4 Yoga and 4 falls prevention programs) met the criteria for falls prevention. The percentage of Winnipeg seniors (aged 65+ years) and exercise programs by community area is shown in Figure 1. The majority of programs (92) target older adults in the general population and 21 programs target older adults with specific medical conditions, including arthritis, neurological conditions and general disability. One program offers one-on-one training in the home for individuals who are unable to attend community exercise classes.

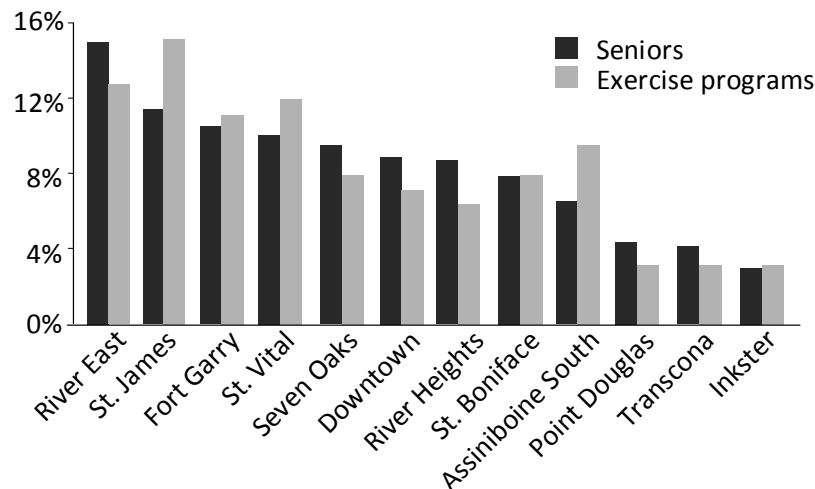


Figure 1: Percentage of seniors and exercise programs by community area (Population of Winnipeg RHA; June 1, 2011)

Only 17 programs have a 12:1 instructor participant ratio or less, and only 9 of these target older adults in the general population as opposed to those that target people with specific health concerns. Among general population programs, 1 is a general exercise/strength training programs, 4 are dance programs, 3 are Tai Chi programs and 1 is a falls prevention program. Programs with less than or equal to 12 participants per instructor by community area are shown in Figure 2.

Four exercise programs specifically aim to prevent falls and these programs are located in Assiniboine South, Fort Garry, River East and St. Boniface. Only one of these programs has an instructor participant ratio of 12:1 or less. This program is run by a physiotherapist, includes an individual assessment of participants and costs \$13 per class. The other three programs have 15-25 participants per instructor, are run by a physiotherapist (1 program) or Manitoba Fitness Council certified fitness leader (2 programs), provide options for exercise progression and difficulty, but no individual assessment, and cost between \$4.50 and \$8.50 per class.

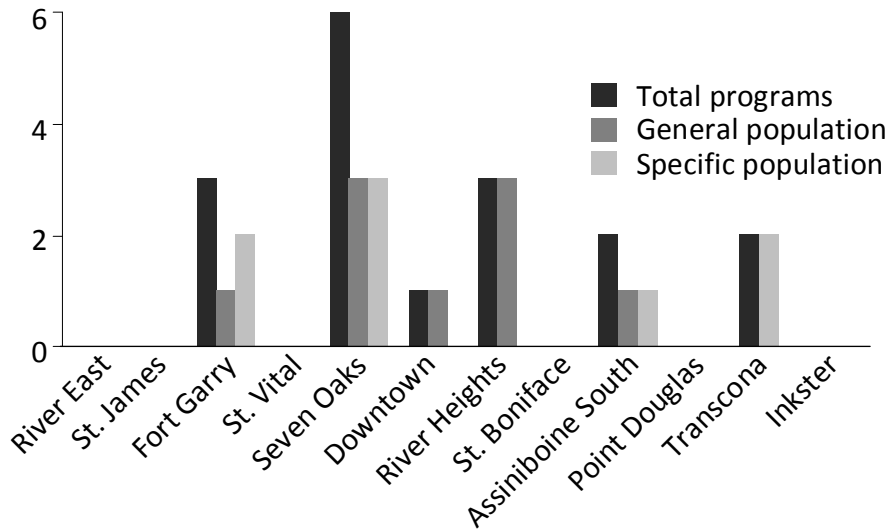
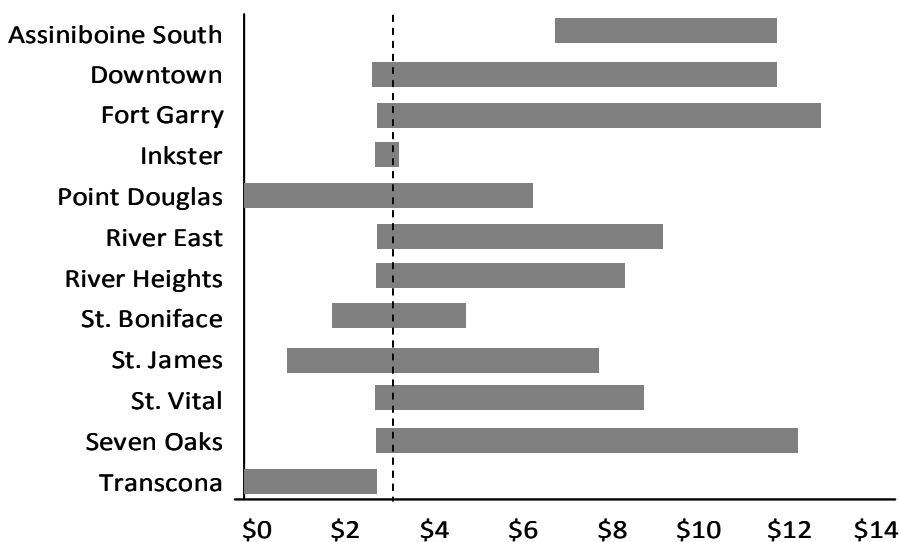


Figure 2: Number of programs with an instructor: participant ratio of less than or equal to 12:1 by community area

The cost of attending the exercise programs ranges from free to \$13 per class. The cost range of programs by community area is presented in Figure 3.



Older adults who participated in the focus groups indicated that program cost, difficulty getting to programs and impaired exercise ability and/or motivation were the primary reasons for not exercising. A number of individuals suggested that \$3 per class was a reasonable cost for older adults on fixed incomes. This is amount marked by the dashed line on the figure.

Figure 3: Range of program costs (per class) by community area

**Conclusions:**

Most programs that meet the recommended physical activity guidelines for falls prevention target high functioning older adults. Among general population programs, 74% are classified as general exercise, strength training or dance, and only 22% are classified as Tai Chi or falls prevention. Furthermore, only 9 programs (10% of all programs) have an instructor participant ratio of 12:1 or less. Although the distribution of exercise programs is similar to the distribution of Seniors by Winnipeg community area, there are no Tai Chi or falls prevention programs in Seven Oaks, Point Douglas or Transcona, and programs with small classes sizes ( $\leq 12$  participants) are only available in 6 out of 12 community areas. All community areas have exercise programs that cost \$3 or less per class, except Assiniboine South which has programs starting at \$7 per class.