



Perception of Falls Risk and Prevention Results from the Older Adults Falls Prevention Survey, 2012

Purpose

In 2012, Ottawa Public Health (OPH) conducted the Older Adults Falls Prevention Survey to meet a need for local data on older adults' falls prevention behaviours. It surveyed 1,050 non-institutionalized Ottawa adults aged 65 years and older by telephone.⁽¹⁾ This fact sheet summarizes the perceived susceptibility and preventability of falls among Ottawa seniors as well as awareness of the fall prevention behaviours recommended by OPH^(2, 3):

- **Review medications on an annual basis with a doctor or pharmacist;**
- **Have an annual eye examination and a regular health exam with your doctor or nurse practitioner, and report any falls;**
- **Install and use home safety devices such as hand rails, grab bars and night lights;**
- **Accumulate at least 150 minutes of moderate- to vigorous- intensity aerobic physical activity per week, in increments of 10 minutes or more;**⁽⁴⁾
- **Add muscle and bone strengthening activities at least two days per week and regularly participate in physical activities to enhance balance (particularly older adults with poor mobility);**⁽⁴⁾
- **Eat three or more servings of calcium rich foods daily;**⁽⁵⁾ and
- **Take a vitamin D supplement daily.**⁽⁵⁾

A description of OPH, partner and community falls prevention services are provided at the end of the fact sheet. The results are intended to help service providers who work with older adults to tailor awareness and education campaigns on preventing falls, to support client education, and to inform program priorities and policy development.

Highlights of survey results

- Nine out of ten seniors agree that falling is a concern for people their age and that falls in their age group can be prevented. Females, older seniors, and lower income seniors are more likely to perceive falling as a concern for people their age.
- Most seniors understand the benefits of eye exams, physical activity and home safety devices in falls prevention.
- Only half of seniors know that reviewing medications on an annual basis with a doctor or pharmacist can reduce the risk of falls.
- Half of seniors know that taking vitamin D daily reduces their risk of falling and two thirds know that eating three or more servings of calcium rich foods daily does so.

Results

Perception of the susceptibility and preventability of falls

While older adults may be aware that falls are an important and preventable health concern, they may underestimate their personal susceptibility. A lack of perceived susceptibility to falling can also lead to lower uptake of fall preventive interventions and behaviours.

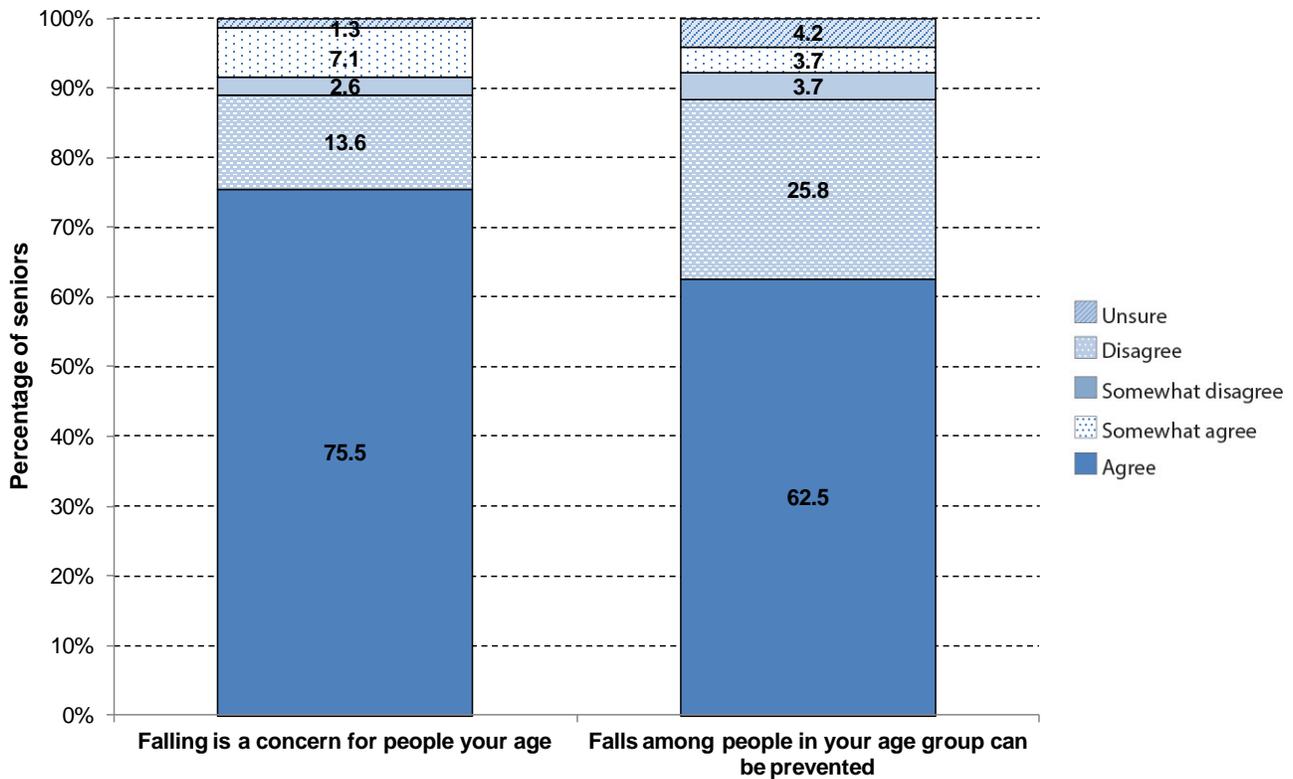
Falling is a concern for people my age

- Three quarters of seniors (75.5% (72.4%, 78.3%)) agreed that falling is a concern for people their age, while 13.6% (11.4%, 16.1%) somewhat agreed, 2.6% (1.6%, 4.0%) somewhat disagreed, 7.1% (5.5%, 9.1%) disagreed, and 1.3% (0.7%, 2.3%) were unsure. (Figure 1)
- Women (81.5% (78.1%, 84.4%)) were more likely than men (67.7% (62.3%, 72.6%)) to agree that falling is a concern for people their age.
- The percent of seniors who agreed or somewhat agreed that falling is a concern for people their age increases by age.
- Seniors with a household income <\$40,000 (85.8% (79.4%, 90.5%)) were more likely to agree that falling is a concern for people their age compared to those with household incomes \$40,000 to <\$70,000 (70.9% (63.7%, 77.2%)) and ≥\$70,000 (72.8% (66.1%, 78.6%)).
- There are no differences in perceived risk of falling by education, mother tongue language, or immigration status.

Falls among people in my age group can be prevented

- 62.5% (59.4%, 65.6%) of seniors agreed that falls among people in their age group can be prevented, while 25.8% (23.1%, 28.8%) somewhat agreed, 3.7% (2.7%, 5.1%) somewhat disagreed, 3.7% (2.6%, 5.2%) disagreed, and 4.2% (3.1%, 5.7%) were unsure. (Figure 1) This is not different by sex, age, education, income or immigration status.
- Seniors with English mother tongue were most likely to somewhat agree that falls among people in their age group can be prevented; however, there are no differences by mother tongue in those that agreed they can be prevented.

Figure 1: Perceived susceptibility and preventability of falls among Ottawa seniors, 2012



Data source: Older Adults Falls Prevention Survey, Ottawa Public Health 2012. Based on self-reported data.

Awareness of falls prevention recommendations among seniors

Table 1: Awareness of falls prevention recommendations among seniors by social determinants of health, Ottawa, 2012

Population breakdown	Proportion aware of falls prevention behaviours (%)
Overall	<p>Seniors most commonly perceived the following as behaviours that could reduce their risk of falling (Figure 2):</p> <ul style="list-style-type: none"> Installing and using home safety devices such as hand rails, grab bars and night lights (90.0% (87.9%, 91.7%)); Being active for at least two and a half hours or 30 minutes 5 times a week (86.4% (84.1%, 88.3%)); Having an annual eye examination (77.0% (74.2%, 79.5%)); Regularly participating in strength or resistance exercise including yoga and Tai Chi (76.8% (74.1%, 79.4%)); Eating three or more servings of calcium rich foods daily (66.8% (63.7%, 69.8%)); Reviewing medications on an annual basis with a doctor or pharmacist (56.4% (53.1%, 59.6%)); and Taking a vitamin D supplement daily (53.1% (49.9%, 56.3%)). <p>Less than half (44.0% (40.8%, 47.3%)) thought taking four or more medications daily would increase their risk of falling, while 31.0% (28.1%, 34.0%) thought taking four or more medications daily would have no impact on their risk of falling. (Figure 2)</p>

Social Determinants of Health

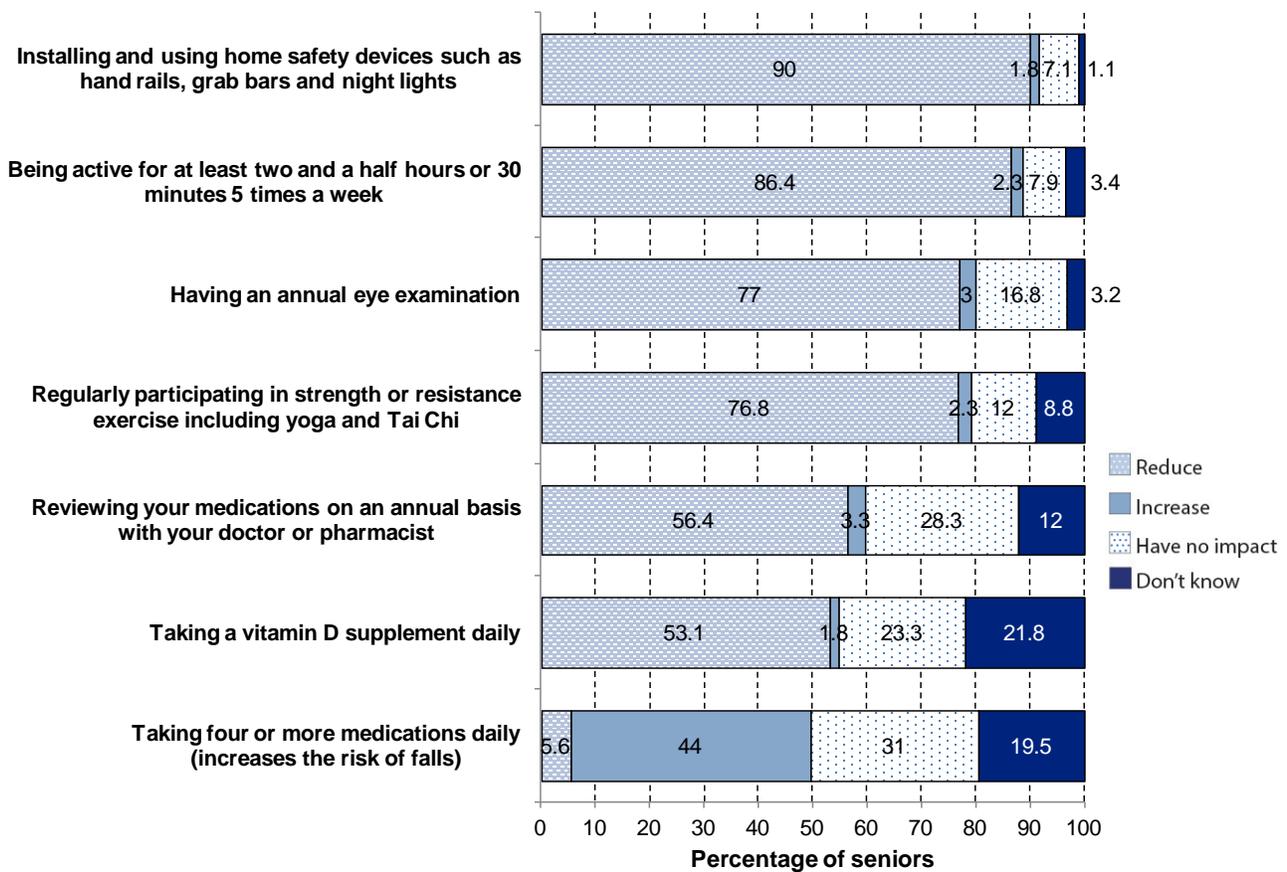
Population breakdown	Proportion aware of falls prevention behaviours (%)
Sex	<p>Women were more likely than men to perceive a reduced risk of falling by:</p> <ul style="list-style-type: none"> • Having an annual eye examination (Women: 80.1% (76.9%, 82.9%); Men: 72.9% (68.0%, 77.4%)); • Taking a daily vitamin D supplement (Women: 60.4% (56.5%, 64.2%); Men: 43.6% (38.4%, 49.0%)); • Eating three or more servings of calcium rich foods daily (Women: 75.6% (72.1%, 78.8%); Men: 55.4% (50.0%, 60.6%)).
Age	<p>Seniors aged 65 to 74 years were more likely than older seniors (75 to 84 and ≥ 85 years) to perceive a reduced risk of falling with the following behaviours (Figure 3):</p> <ul style="list-style-type: none"> • Installing and using home safety devices such as hand rails, grab bars and night lights (65 to 74: 92.1% (88.9%, 94.4%); 75 to 84: 89.3% (85.7%, 92.0%); ≥85: 83.6% (78.4%, 87.7%)); • Being active for at least two and a half hours or 30 minutes 5 times a week (65 to 74: 90.8% (87.5%, 93.3%); 75 to 84: 84.1% (80.1%, 87.4%); ≥85: 74.5% (68.8%, 79.6%)); • Regularly participating in strength or resistance exercises including yoga and Tai Chi (65 to 74: 83.0% (78.9%, 86.5%); 75 to 84: 72.7% (68.0%, 76.9%); ≥85: 62.3% (56.1%, 68.1%)); • Having an annual eye examination (65 to 74: 82.8% (78.6%, 86.3%); 75 to 84: 70.1% (65.3%, 74.5%); ≥85: 70.4% (64.4%, 75.7%)); • Eating three or more servings of calcium rich foods daily (65 to 74: 70.5% (65.7%, 74.9%); 75 to 84: 63.5% (58.5%, 68.2%); ≥85: 60.2% (54.0%, 66.1%)); and • Reviewing medications on an annual basis with a doctor or pharmacist (65 to 74: 61.9% (56.9%, 66.6%); 75 to 84: 53.3% (48.3%, 58.3%); ≥85: 42.2% (36.2%, 48.4%)).
Education	<p>Higher education status is associated with an increased awareness of certain falls preventive behaviours.</p> <p>Seniors with a college or university diploma or degree and those with some post-secondary education were most likely to perceive a reduced risk with the following behaviours:</p> <ul style="list-style-type: none"> • Reviewing medications on an annual basis with a doctor or pharmacist; and • Having an annual eye examination; <p>As well, the proportion of seniors that perceived regular participation in strength or resistance training to reduce the risk of falls increased with increasing education.</p> <p>Seniors who did not graduate high school were least likely to perceive that installing and using home safety devices such as hand rails, grab bars and night lights; and being active for at least two and a half hours or 30 minutes 5 times a week; reduces the risk of falls.</p> <ul style="list-style-type: none"> • Seniors with a college or university diploma or degree were most likely to perceive that taking four or more medications daily increases the risk of falls.

Population breakdown	Proportion aware of falls prevention behaviours (%)
Household income	<p>Seniors with household income of \geq \$70K were most likely to perceive that the following behaviours reduce their risk of falling:</p> <ul style="list-style-type: none"> • Reviewing medications on an annual basis with a doctor or pharmacist; • Being active for at least two and a half hours or 30 minutes 5 times a week; and • Regularly participating in strength or resistance exercises including yoga and Tai Chi. <p>The proportion of seniors who perceived that taking four or more medications daily increases the risk of falling increases with higher household income.</p>

Data source: Older Adults Falls Prevention Survey, Ottawa Public Health 2012.

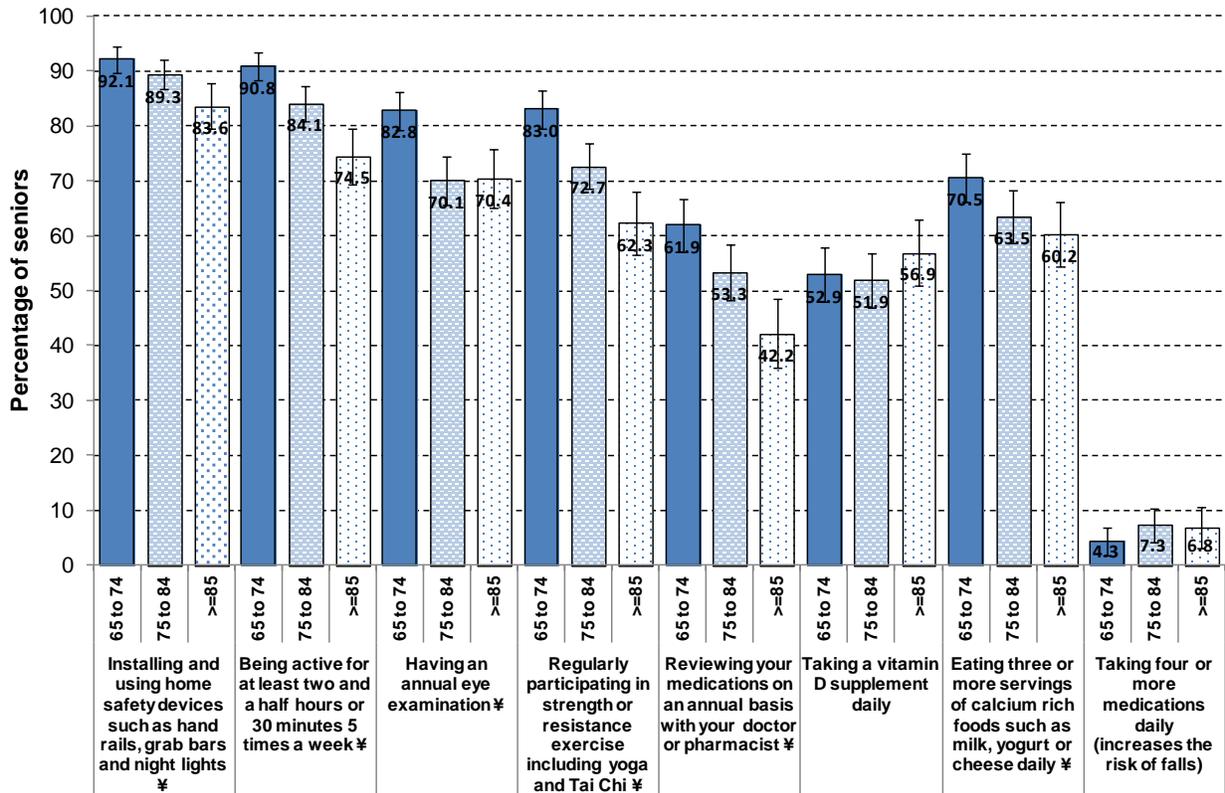
Data note: Only social determinants of health that showed a significant difference between categories are displayed in the table. There was no difference in awareness of falls prevention behaviours by mother tongue language or immigration status. K = thousand. Based on self-reported data.

Figure 2: Seniors' perception of the impact of behaviours on the risk of falling, Ottawa, 2012



Data source: Older Adults Falls Prevention Survey, Ottawa Public Health 2012. Based on self-reported data.

Figure 3: Percent of seniors by age who perceive a reduced risk of falling by behaviour, Ottawa, 2012



Data source: Older Adults Falls Prevention Survey, Ottawa Public Health 2012.

Data note: † Indicates significant differences by age group. Based on self-reported data.

Implications for programs and practice

Everyone can play an active role in preventing falls, from the clinician and service provider to the planner and policy maker. For example, we can:

1. Emphasize that taking 4 + medications is a risk factor for falls;
2. Encourage older adults to report falls and near falls to care providers; and
3. Increase community awareness on specific fall risk factors and ways to prevent falls.

What Ottawa Public Health does

Ottawa Public Health (OPH) carries out individual, group and community-level interventions to engage and support older adults in reducing their falls risks and adopting healthy living practices. OPH efforts in addressing seniors' issues are enhanced by our relationships with community agencies and other city departments, for example, the Aging in Place Project in Ottawa Community Housing buildings.

Some of OPH's key activities include:

- The "Taking Care of My Health" Campaign and Community Awareness. Using a multimedia approach, the campaign includes articles in local newspapers, interstitials and messages on social media – information and tips posted on OPH website and Tweets.
- Education. Falls prevention messages, tips and demonstrations are also integrated into ongoing group education sessions and community events. These activities are carried out at seniors' apartment buildings, churches, seniors' centres and in other settings where seniors congregate.
- Screening Clinics and Referrals. Public Health Nurses organize and conduct screening clinics targeting older adults. The screening includes:
 - history of falls
 - gait and balance testing
 - postural hypotension

Older adults identified at risk for fall are referred to appropriate community resources for further assessment.

- The Friendly Corner is a health information and activity centre for seniors, managed in partnership with St. Laurent Shopping Centre, Ottawa Public Health, and a group of dedicated volunteers. A public health nurse and volunteers coordinate activities that promote healthy living enhance safety and independence for participants. For information call: 613-580-9620
- Supportive Environments. Ottawa Public Health participates in key regional and citywide coalitions and committees to support the development of programs and policies that help reduce falls risks and improve overall health of older adults in Ottawa.

OPH's key messages for seniors regarding falls prevention:

Have an annual check-up:

- Have a regular health exam with your doctor or nurse practitioner every year and report any falls
- Review your medications with your doctor or pharmacist every year
- Have your eyes checked every year for changes in their health and vision

Be active:

- Take part in at least 150 minutes (2.5 hours) of aerobic physical activity every week
- Minutes count-be active in blocks of 10 minutes at a time
- Do strength and balance activities like lifting weights and Tai chi at least twice a week

Eat for healthy bones:

- Eat 3 servings of foods high in calcium every day
- Take a daily vitamin D supplement of 400 IU

Make your home safe:

- Keep your home well lit and free of trip hazards
- Remove scatter rugs and loose carpets
- Add secure grab bars in bathroom
- Install sturdy handrails that extend to the bottom on both sides of your stairs

For more information on healthy aging programs offered by Ottawa Public Health, to book a group education session and to find out about screening clinic locations near you call:

613-580-6744

1-866-426-8885

TTY: 613-580-9656

www.ottawa.ca/health

Community resources

There are also many resources within our community that encourage older adults to adopt fall prevention behaviours.

West End Integrated Falls Prevention Program

- Works with seniors, health service and community agencies to reduce the number of falls and their impact on seniors, their caregivers and the health care system through: assessment and intervention for high risk seniors, education, information and health promotion, and best practices education for practitioners. <http://www.pgchc.com/seniors/falls-prevention/>

Regional Geriatric Program of Eastern Ontario

- The program is a coordinated network of specialized assessment, treatment and rehabilitation services for elderly persons whose well being, independence, or functional ability is threatened by multiple health or social problems <http://www.rgpeo.com/en.aspx>

Community Care Access Center

- The program coordinates professional health and treatment program in residents' home. <http://www.ccac-ont.ca/>

Reference documents and supplementary resources can be found on:

- <http://www.champlainhin.on.ca/> Integrated Provincial Falls Prevention Framework & Toolkit
- <http://www.canadianfallprevention.ca/>
- <http://www.oninjuryresources.ca/>
- <http://www.findingbalancealberta.ca/>
- <http://www.preventfalls.ca/>
- <http://www.phac-aspc.gc.ca/seniors-aines/>

Visit www.champlainhealthline.ca for more information on additional community resources and programs.

Survey methods and data analysis

In this fact sheet, older adults or seniors are defined as adults aged 65 years and older.

Ninety-five percent confidence intervals (95% CI) are presented following the population estimates in smaller font and within brackets (e.g., 75.5% (72.4%, 78.3%)). 95% CI are used to describe the precision of the population estimate.

Only statistically significant findings are included for demographic breakdowns (sex, age, education, income, immigration, and mother tongue). 95% CI were not used to test for statistically significant differences; Chi-square tests ($p < 0.05$) were used first, followed by a Bonferroni correction ($p < 0.05$) to adjust for multiple comparisons.

The asterisk (*) indicates a high sampling variability in the responses from seniors to this category and the findings should be interpreted with caution.

See the Older Adults Falls Prevention Survey Methods Fact Sheet for more information.

Acknowledgements

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