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**Health Canada/Veterans Affairs Canada  
Falls Prevention Initiative**



**Final Report**

**“Stepping Out Together”**

**North Okanagan Falls Prevention Network**

**“Overcoming the Barriers to Change”**

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**Administered by the Social Planning Council for the North Okanagan**

**April 30 2004**

## Background:

In the fall of 2000, the North Okanagan Health Region (NOHR), alarmed at the high rate of falls among the elderly population, hired the Social Planning Council for the North Okanagan to determine which NOHR communities were in a position to participate in and support strategies to reduce falls in the region.

Through a community development process involving the communities of Vernon, Armstrong-Spallumcheen, Enderby, Salmon Arm and Revestoke the “Stepping Out Together” network of seniors and veterans’ groups, caregivers, public organizations serving seniors, local government and Emergency Services was formed to support a funding proposal with Health Canada. ***Stepping Out Together*** as a community partnership generated the ideas, which were presented in the proposal and established a structure for implementation and evaluation of the initiatives. The major partners, who sponsored the project, were the Social Planning Council for the North Okanagan (SPCNO) who will facilitate and administer the project, BC Injury Research and Prevention Unit (BCIRPU) who will guide the evaluation and the North Okanagan Health Region (later integrated into the Interior Health Authority) who provided information and participation of Health Care Professionals.

Although all five population centres within NOHR had a high percentage of at risk seniors it was decided that two communities would pilot the program. Greater Vernon and Enderby have a high seniors population (12,000), set to increase by 30% in the next 10 years, and a large number of veterans (700) receiving service. The North Okanagan Health Region at the time of the application, had the second-highest fall rate in British Columbia, had seen an increase in falls amongst seniors of 60% between 1994/5 and 1998/9 and had the highest fracture rate amongst seniors in Canada<sup>a</sup>. The problem was particularly acute for our community-dwelling seniors and veterans over 75 years old, who were experiencing the greatest number of falls and the highest proportion of falls, resulting in a hip fracture. The falls amongst this group were occurring in the home.

An evidence-based approach was adopted in the development of our fall prevention interventions. Successful strategies had been analyzed and adapted to meet the needs of the local seniors, veterans and caregivers. Community experience provided an awareness of the barriers to participation and behaviour change in seniors and veterans experience of local health promotion activities. Our initiative incorporated the awareness of barriers into the planning, delivery and evaluation processes and successfully bridged evidence-based practice with the unique needs of our local seniors and veterans.

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<sup>a</sup> NOHR Hospital Injury Admissions Report 1999 and CIHI National Trauma Registry

## 1. Project Accomplishments:

The primary goal of the project was “to reduce falls and falls risks amongst seniors by working with seniors to overcome the barriers to participation and change”, with a focus on informing and supporting seniors to make changes, which impact on their risk of falling.

The secondary goals of the project was:

- *To encourage the development of relationships* between community members and organizations, which have an interest in health, through the maintenance and extension of the Network
- *To create a sustainable network*, which will mobilize the community to develop the skills to identify and tackle issues, through the development of community leadership within the Network and the potential for the Network to generate ideas and solutions.

The Project Objectives were:

- (i) *Raise Awareness about falls risk amongst workshop participants by 50 % and gain commitment from 20% of participants to address at least one of their personal fall risks.*
- (ii) *Attract 100 workshop participants to have their medication reviewed.*
- (iii) *Reduce one or more home hazards amongst 50% clients of the Home Intervention Service in Vernon and Enderby by October 2003*
- (iv) *Confirm/Identify the barriers to participation and change, experienced by seniors and veterans in addressing their risk of falling.*
- (v) *Consolidate and extend the work of the Network as evidenced by the development and implementation of one new falls-related project in each community by January 2003.*

In addition, the team from the BC Injury Research and Prevention Unit in Vancouver provided evaluation and research support.



**What has been achieved in this project? Identify successes and challenges.**

**SUCCESSES:**

- The original goal was attract 100 participants to have their medication reviewed. 350 consumers attended workshops that addressed the use of medications.
- 46% of the workshop participants who completed the evaluation identified at least one specific behaviour change they were going to make (The goal was 20%)
- After one year, 61 % of respondents described behaviour changes
- Of the 75 home safety checks recorded in the database, 49 participants completed a 3 month follow up call. 78% had addressed at least 1 home safety hazard. The goal was 50%<sup>b</sup>

**Did the project reach its main objective to reduce falls and falls risks amongst seniors...?**

- 66% of the participants (436) involved in the evaluation reported at least one fall in the past year, prior to the workshops.
- Of the 153 participants contacted after one year, there was a 75% reduction in falls by that group.
- Of the above target group, 46% had some form of injury due to their original fall prior to the program. One year later only 7% of the same sample reported an injury from a fall, with 3% requiring hospitalization. (Down from 10%).
- **A projected cost savings of over \$479,415 per year could be realized as a result of the program. The cost of the project was \$ 255,000 over a three year period. This translates into a potential savings be dollar invested of \$6.25 saved for every dollar spent on the program**

<sup>b</sup> The discrepancy in the HCS numbers are because the last few were not available in time for the evaluation report.

## Highlights:

### **Over 100 local citizens were involved in the project. They included:**

- 7 project staff
- 15 individual from the local professional health sector
- 5 community service providers
- 3 OUC students
- 3 veterans volunteered as peer leaders and another 60 veterans and 57 spouses of veterans participated in the programs
- 70 volunteers from Vernon and Enderby were involved in six different committees (some on more than one)
- 7 seniors participated in the speakers bureau
- 15 seniors were trained as peer leaders
- 19 seniors were trained as Home safety check volunteers
- 28 volunteers assisted with special promotional events such as the falls fairs
- 21 volunteers provided office support including manning the falls hot line, developing the newsletters, delivering posters and entering data on the computer
- In the last 18 months of the project, it is estimated that volunteers contributed over 3000 hours toward the project.

### **Over 3000 participants in the communities of Vernon, Enderby, Armstrong and Lumby had contact with the project from September 2001 through March 2004. They included:**

- 2060 people participated in our falls fairs over three years
- 519 consumers attended or participated in a falls prevention workshop
- 76 Home safe checks were carried out with 98 seniors in their homes.
- *Members of the Falls Prevention Speakers Bureau presented 494 members from various community groups with an overview of the program.*



## CHALLENGES:

- **FEWER HOME SAFETY CHECKS** referrals from Health Care professionals than anticipated resulted in lower numbers. We only reached 76% of our goal of 100 homes. However, during the last quarter of the project a dramatic increase in referrals took place. As of April 1 2004, 31 seniors were on the wait list.
- **THE TRANSITIONAL PHASE** after April 2004 requires a shift in workload as transitional funding from the Health Authority reduces staff time from 5 days a week to 2 days. In addition, Enderby will have no staff funding. The demand and the expectations for the program are still evident. The volunteers will play a larger role in this phase.
- **SUCCESS BREDS SUCCESS.** 5 communities to date; within the Health Region have expressed a desire to start a NOFP program. Although the Health Authority will support the training of the community volunteers, there will be a need for on going support of these programs. We must balance the needs of those communities while serving our consumers.
- **LONG TERM SUPPORT.** The Health Authority has provided transitional funding for one year. The challenge will be to have the program part of core services in 2005 and beyond.

## What tools / resources have been developed by this project?

- **TRAINING MANUALS** to be used to train community volunteers and coordinators of volunteers in communities starting up a Fall Prevention Program. These manuals, developed by our Coordinator, includes step-by-step guide on running a FP program.
- Our **WEB PAGE** at: <http://www.socialplanning.ca/seniors/falls/index.html> has proven to be very popular to those interested in Falls Prevention Programs.
- A **QUARTERLY NEWSLETTER** was distributed during the program.
- **SOCIAL MARKETING** items were developed for distribution including pens, magnets, bookmarks, posters and a portable display stand.

## **2. Project Work plan:**

### **Summarize the project activities completed during the entire project.**

From the start of the project, success would be measured by the involvement of the volunteers and support of Health Care Professionals. Both groups were involved from the first day. The first program change came immediately after the Coordinator was hired.

The Enderby volunteers wanted a distinct program separate from Vernon. Although this created logistical and workload problems that we had not anticipated, it was in keeping with our community development model.

The first task was to formalize the community groups into steering committees to guide the project for each community. Two steering committees were formed and several task groups were formed to assist the Coordinator to develop the training manuals for the three strategies (Education, Medication review and Home Safety Checks)

It was soon decided that the project would hold a launch in each community in the form of a Falls Fair. This would serve several purposes: (1) introduce the project to the communities (2) Provide information to the target group and (3) Provide a setting to recruit volunteers and consumers.

The Fairs were so successful that the project raised immediate expectations that could not be fulfilled in the short term. It was several more weeks before the first training manual was ready. From the Fair we had recruited the first pool of volunteers and had individuals ready to take the workshops. It wasn't until the New Year (2002) that we could deliver the first workshop.

In the New Year, trained volunteers were offering workshops in both Falls Prevention risk factors and in Medication Reviews. The feed back from the volunteers was that the workshops were overlapping with similar information, they were too long and the evaluation questions were too lengthy. Based on that feedback, the program merged the two workshops, shorted the time and reworked the evaluation questions.

It was also apparent that we had underestimated the time required for the program coordinator, especially now that we had two communities with two strategies in each community. A volunteer coordinator was hired to compliment the workload.

The two shared a 1.5 FTE. In the second phase, starting in the spring of 2002, the coordinator developed the Home Safety Check training manual, recruited volunteers and trained them. This strategy proved to be very labour intense in the beginning. This was due to the fact that the volunteers were conducting the work in the senior's home. In the fall of 2002, the program coordinator left the program for maternity leave. The volunteer coordinator took over full time and a part time coordinator was hired in Enderby to provide local support. For the remainder of the project the community coordinators provided the logistical support to the volunteers, organized the Fall Prevention workshops and coordinated the home safety checks. Quarterly steering committee meetings were held through out the time of the project. The task groups were discontinued once the task was completed. The project manager provided the link with the sponsors, the health care community and the other Falls Prevention projects in the Province



**Specific activities related to the program objectives include:**

**Raising Awareness about falls risks.**

- In order to raise awareness, there must be a multi-facet strategy. The workshops were our main activity for this objective. However, it was the on going and constant message that was conveyed to the communities that made the difference. The media was very supportive. Radio coverage, local TV and the community newspapers conveyed our messages to the public. Our logo ran in the local paper for over one year. Our speakers Bureau reached over 500 people at various functions. The Falls Fairs was a community event two years in a row. The program was written up in national magazines (Veterans Affairs) and bookmarks and magnets were widely distributed.



## **Conducting Home Safety Checks**

- The Program completed 76 of the 100 Home safety checks set as a target. At the end of the program 31 homes were on the wait list. As the program is continuing on with reduced financial support, these homes will be checked for home hazards.
- The start up of this initiative was delayed by almost a year. This was due to several reasons. The development of the training materials for the initiatives took much longer than originally anticipated. The coordinator was working with two communities and originally the Medication and Fall Prevention workshops were separate. There was a staff change one year into the program and the home safety checks proved to be much more labour intense than originally planned.

## **Confirm/Identify the barriers to change, experienced by seniors and veterans in addressing their risk of falling.**

- This objective was designed to improve our understanding of barriers to participation and change. The program evaluation was specifically designed to capture some of these concerns, which might prevent seniors from addressing risk factors.
- The evidence from the evaluation results indicate that for those people that we can reach, they are prepared to make changes and participate in their own efforts to reduce risks.
- Most seniors and veterans that we met through the course of the program are aware of the heavy toll a fall will have on the individual and their family. It's the ones that we didn't reach that may have the barriers to overcome.

The original proposal identified barriers to participation. We addressed these as follows:

- Logistical – Our events were held at convenient locations and transportation was offered for those in need.
- Economic – There were no costs to any of our events. The Home Safety checks offered financial grants for those in need.
- Social- this was a more difficult barrier to overcome. Participants were self-selected. They chose to become involved. We were only beginning to make strides with the frail elderly in the community as the project phase. We believe in the long term, with the support of referrals from Home and Community Care, we will reach this target group.

- Structural- The program involved both municipalities to reduce risks in the community. The HASI program provides grants to assist with individual homes and those that participated in the workshops learned how to seek out advice with their medical advisor.

The original proposal also identified barriers to change. Our response was:

- Knowledge – The workshops, the newsletters and the media coverage provided information on successful strategies to reduce risks.
- Accessibility – The volunteers conducted safety checks in the individual homes. Presentations were made to the visually impaired. Medical Supplies and equipment business participated in the falls fairs. The information at the workshops was presented in such a way that literacy or low education was not generally a factor
- Applicability – The program was self-selected. People chose to participate or not to participate. Based on the publicity around falls issues, both in terms to economic and social costs to the individual and the health care system, people generally get it.
- Acceptability – Buy-in from the community was a big factor in the success of this program. Seniors were involved at all levels. The staff listened to the feedback and made changes to the betterment of the program. The Sponsoring Agency and staff had a positive history with the communities.
- One barrier, which the program never overcame, was the lack of referrals from the Veteran Affairs Area Councillors. This was both a disappointment and point of contention as their client base was considered part of that frail elderly group that we did not reach as well as we would have liked. **Even without the referrals we managed to reach a significant number of veterans (60 veterans and 57 spouses of veterans)**

**Consolidate and extend the work with one new project.**

- The Okanagan Indian Band has adopted the NOFPP. OKIB Band members have been trained in the home safety check program and a coordinator is in place.
- Other communities, which have expressed interest in starting a NOFP program, include: Kamloops, Nelson, Peachland, Creston and Revestoke.
- The Enderby volunteers are providing assistance to seniors in the neighbouring community of Armstrong

**Describe the target group reached for each main activity.**

- See the Evaluation

### **Highlight activities completed in the last quarter**

- Sustain funding with Population Health Interior Health.
- Develop guides to be used for the purposes of starting up Falls Prevention Programs within other communities.
- Support OKIB with further training for the HSC initiative as well as to offer administration support to the OKIB Program Coordinator.
- Train NOFPP office volunteers for the setting up of HSC's so they can assist in program administration starting April 2004
- Gather materials and supplies needed to assist in the sustaining of the program.
- Assist Enderby in sustaining the established Falls Prevention Program.
- Gain recommitment from NOFPP volunteers for carrying on with the NOFPP program and begin a recruitment plan in April for new volunteers to fill any identified gaps.
- Complete reports and evaluation
- Host Volunteer Appreciation Event (Feb 20, 2004)



### **Falls Prevention Medication Review Workshop:**

The FPMRW workshop volunteer facilitators have come up with some great ideas to continually enhance the quality of the workshop. They requested from a local pharmacy warning labels that go on medication bottles (16 were attained).

We asked a local volunteer youth group (YETI) if they could draw the labels on flip charts and had them laminated. The labels are now part of the presentation and have clear and large drawing that are easily read by seniors.

## **Home Safety Check**

The number of referrals from Health Care Professionals has been increasing tremendously assisting us in reaching our goal of reaching isolated seniors. The HSC wait list has 31 participants on it.

We have received referrals from Doctors, Community Care Nursing, Quick Response Team, Private Occupational Therapist and self-referrals as well as referral from family members.

A recruitment drive for HSC volunteers to help out with getting participants through the program quicker. We currently have 6 active HSC volunteers in Vernon as we have lost 2 to severe illness and 1 with an injury. The next HSC training will be on May 19, 2004 for new volunteers (have 4 registered).

## **Develop one new project/strategy**

The Okanagan Indian Band (OKIB) Program Coordinator Mary Louis has been highly motivated in getting a Falls Prevention Program up and running. She has been busy communicating with key persons, recruiting volunteers, setting up dates and times of training, co-facilitating the training, learning the administration process for setting up HSC's and looking at ways of establishing funding for the program. Recently she has applied for some funding to develop a geriatric day program and if this is successful she will incorporate the Falls Prevention program under this umbrella.

The OKIB Falls Prevention team is looking at the Sages model for falls prevention, as they are interested in starting a weekly program addressing the many areas such as eye care, nutritional tips, assistive devices, foot care and foot wear, medication safety, medications and alcohol and exercise.

There has been an interest in reducing the risk of falls within the community and therefore to begin researching with the assistance of the community governing agency's to understand better the current guidelines around street lighting, road repair, property divisions to determine who is responsible for which part of the roadways, driveways, roadway shoulders etc.

The fact that the HSC program has the support of elder volunteers has been crucial to the success of the program. Mary has worked hard to support the volunteer's move into an ownership role with the program and although it is in the early stages there are certainly signs of this happening.

### **Other Accomplishments during this quarter**

- Revisions of the HSC volunteer guide and administration forms
- Revisions of the FPMRW volunteer guide and administration forms
- Development of the HSC administration guide; of the FPMRW administration guide and of the Falls Prevention guide and forms
- Sustained funding with Population Health Interior Health
- Trained OKIB Program Coordinator in the administration process
- Trained NOFPP office volunteers for the setting up of HSC's
- Began a recruitment plan for new volunteers to fill gaps.
- Attended HC/VAC EKOS meeting in Vancouver Feb 8 – 10, 2004
- Held volunteer appreciation event on February 20, 2004 – 44 in attendance
- Held 3 (part day) training sessions for the OKIB HSC volunteers
- Identify what has worked well and why, what did not work and why, and a description of results that were not related to the original proposal but have had an impact on the project, either positive or negative.

### **What could you do differently in future projects?**

- Work with one community at a time.
- Incorporate a balance program.
- Identify frail elderly in communities and develop a formal referral agreement with Home and community Care.

### **3. Partnerships:**

- Health Authority - They provided initial community development funds, professional health care staff participated in the committees, provided guidance for the resources and referrals of clients
- BC Injury Research and Prevention Unit – Evaluation, data collection, surveillance and research support
- Health Canada – Financial support, linkage with other programs and guidance
- Veterans Affairs – Regional support
- Okanagan Indian Band – Develop Falls program
- City of Enderby and the City of Vernon – commitment for risk reduction in community
- Safe Community Office in Vernon – Staff for the Steering committees

#### **4. Senior and Veteran Involvement:**

70 volunteers from Vernon and Enderby were involved in the various committees and in the workshops and home safety checks. 60 veterans and 57 spouses of veterans took part in the programs

The most important thing we learned through this project is that it would not have happened without the involvement of the seniors – both as peer leaders and as participants.

They were there in the beginning; many were there for the entire length of the project. Our role was to guide, their role was to lead. We took their feedback serious and made changes as required. This population health approach proved to be a winner.

It was not a major challenge working with the seniors as our agency has had a long history working with this population. We were well positioned to provide the leadership required to support the seniors as volunteer peer leaders and as participants in the program.

The challenge for the support team was keeping the interest and making the experience worthwhile for the volunteers. Many of the volunteers were highly qualified individuals who were self motivated. They became involved with the FP program for many of the same reasons people volunteer. They believed in the issue. They want to stay involved in their community. They hoped to learn new skills and they believe they can make a difference. In at least one case it gave the individual meaning to his life. You could see the personal growth and commitment of those volunteers.

#### **5. Information on Sustainability**

- One of the benefits of developing community capacity is that this creates a new skill bank of trained volunteers. This is the case in both Vernon and Enderby. Less administration and minimum paid staff are required. Both communities still require some coordination and training and supervision of new volunteers but start up costs and overhead expenses are greatly reduced.
- A sustainability report was completed in January 2004. The Interior Health Authority hired an independent consultant to conduct the study. The report was submitted under separate cover.
- As a result of that report's recommendations, Interior Health has provided transitional funding for one year. April-December 04 funding will come from Population Health and Home and Community Care, as part of the Seniors Information and Resource Bureau's budget, will provide Jan-Mar 05 funding.

- The funding was reduced from a 5 day a week program for Vernon plus one day a week in Enderby to 2 days a week for Vernon. Enderby will continue on a volunteer basis with support from Vernon. The total budget for the year is \$24,000.00
- In addition, Population Health will contract with the NOFPP to provide volunteer training and support to new communities within Interior Health. To date 5 communities have expressed interest.

## **7. Feedback on Support from Health Canada/Veterans Affairs Canada?**

- In order for a program such as ours to succeed, all the partners must support each other. Our support from Health Canada and Veterans Affairs and especially our Health Canada regional contact was up and beyond the call of duty. We could not have asked for a better person in Lillian Baaske. She not only held us accountable, but she worked with us to make sure we succeeded. Her site visits were valuable for us as well as provided an “ up close and personal” experience for her. In all honesty, in my 30 years of working with funders, Lillian was number one (Mike Vanderbeck, Project Manager)
  - Several factors made this support work. (1) Multi year funding was essential. Changes had to be made, we had to adapt to the needs of the volunteers and participants and the funding criteria allowed for this.(2) The capacity within the two communities to take this project on (3) The availability and resourcefulness of Lillian allowed for the flexibility required for success. And (4) the opportunity to work with the projects in the region was a real bonus.
- The one change that would have moved us along at the start was to have an evaluation plan in place. A standard template would have helped. As we were the only phase 2 projects in the region, we were at a disadvantage. When we met with the phase 3 projects to discuss evaluation, we were one year into our project. However, the evaluation process and plan we developed for the project could be used as a future template.
  - We are not sure how beneficial the national evaluation process was. We never received feedback from those sessions. Next time hire regional evaluators.
  - We would have liked access to transitional funding from Health Canada. In the forth year, if the program is successful, lets have a cost share plan. The health authorities cover half the budget. That would really help with sustaining the programs.
  - Future funds of this nature should go to the communities, not local government. We were able to succeed where the Health Authorities could not.

- Reward success. Paul Martin talked in his first throne speech of rewarding Centres of Excellence within community settings. Our program has been an overwhelming success. Our agency has a long history and track record of successful and diverse programs. Our Program Manager was awarded the Queens Golden Jubilee Medal for his community work. We are a centre of excellence!

## 8. Media Activity

**Morning Star Article:** March 7, 2004

**Senk'lip News:** February 2004

**Shaw Cable:** Recruiting volunteers

**Poster Check:** March 2004, volunteer went around the community where we have posted posters to check and make sure they are still up and where they weren't she replaced them.

## 9. Financial Report

The final financial report was submitted under separate cover

## 10. Additional Comments:

The support the project received from Health Canada and Veterans Affairs Canada, with their foresight to provide multi year funding, was a major factor in the success of the project. In particular, our mentor at Health Canada, Lillian Baaske, made this journey more than a project – it became our mission to make a difference

**It may take a community to raise a child but it takes the will and support of the community (capacity) for a program such as our to experience success!**

# FINAL EVALUATION

**APRIL 21, 2004**

This reports presents the findings from a summary evaluation of the North Okanagan Falls Prevention Program, a population health based program coordinated by the North Okanagan Seniors Information and Resource Bureau, a program that is part of the Social Planning Council for the North Okanagan.

## **1. PROJECT OVERVIEW**

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In 2000, representatives of the then North Okanagan Health Region, the Social Planning Council and the BC Injury Research and Prevention Unit, local seniors groups, and individual seniors worked to develop a pilot project on falls prevention for seniors. The proposal was aimed at reducing what was then the one of the highest rate of fall injuries and hip fractures in any health region in Canada. The resulting program, the North Okanagan Falls Prevention Program (NOFPP) was funded by Health Canada and Veterans Affairs, and began development in the fall of 2001. The program was offered in two target communities of Enderby and Vernon. The program uses evidence based intervention strategies for falls prevention which include the following elements:

- 1) *Falls Prevention Workshops* provided to groups of seniors in a 1.5 hour interactive session led by peer facilitators which review the biological, behavioral and environmental risk factors that lead to falls and discuss fall prevention strategies. Workshop participants are called for follow up evaluations after 3 months and 1 year.<sup>c</sup>
- 2) *Home Safety Checks*: participating seniors received a fall hazards risk assessment of their residence from a pair of peer volunteer, reviewed suggestions for low cost modifications to reduce these risks and made referrals to financial resources to support more complex /costly modifications for low income seniors. Home Safety Check participants received follow up calls at the 1 week, one month, 3 month and 1 year timelines to evaluate the program and offer follow up support.
- 3) *Peer Leadership* – Based in best practice approaches in community based population health strategies, seniors were involved in the design, delivery and evaluation of all program interventions. Senior peer volunteers facilitated all project interventions.

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<sup>c</sup> The program was originally designed to deliver two separate workshops – one on medication review, the other around general falls prevention activities. Due to feedback from participants and peer facilitators, these workshops were combined into one 6 months into the programs delivery.

In addition to the elements described above, the program conducts the following activities to raise awareness of falls risks and prevention:

- 1) *Falls Prevention Presentation*: 15 – 30 minute presentations to seniors groups on falls risks and preventative measures, including a recruitment request for the longer interventions. Presenters were drawn from a peer volunteer Speakers List.
- 2) *Falls Fairs*: One-day fall events often held in conjunction with annual Flu Clinic held in each community to publicize the program, provide basic information on falls prevention and preventative measures. The fairs hosts displays from various services which provide falls prevention services or and businesses which sell falls prevention devices.
- 3) *Media Campaign*: an ongoing media campaign that involves television, radio, newspapers, posters, and banners, which has achieved strong penetration into the target communities.

The evaluation was supervised by the project manager, Mike Vanderbeck, with ongoing support from the Dr. Marianna Brussoni, B.C. Injury Research and Prevention Unit, and Lillian Baaske, Program Manager from Health Canada. This report provides summative or outcome evaluation of the program, with the intent on addressing the following questions:

1. Were the goals and objectives of the program achieved?
2. Did the program assist participating seniors in reducing falls risks, and, as a consequence, the number of falls?
3. What were some of the key strengths and challenges of the program?
4. Based on the information gathered, what lessons were learned?

## **2. EVALUATION METHODOLOGY**

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Evaluating the North Okanagan Falls Prevention Program involved a number of components

### ***2.1 Program Evaluation Committee***

An evaluation committee of health professionals, program volunteers and staff was struck in the initial stages of the program. The committee was the primary author for the methodology and directly involved in the design and redevelopment of the participant evaluation forms. The committee met on a quarterly basis throughout the project to review project data and to make recommendations regarding issues that had arisen as the program evolved. These meetings provided opportunities for an objective review of the program and specific recommendations to program changes.

### ***2.2 Participant Evaluation Forms***

All participants of the falls workshops and home safety checks were asked to complete forms that contained both quantitative and qualitative information:

- *Pre- program evaluation form* which included the following information
  - Demographic information of program Participants including age, sex, income, education, veteran status

- Fall history 1 year prior to participation in the falls program
- *Post intervention Evaluation Form*, which evaluated the immediate impact of the workshop training, the positive aspects of the program and suggestions for improvement.

The participant evaluation forms underwent a number of iterations at the initial stages of the program. Peer facilitators found the initial forms to be too lengthy, often taking up to 1/3 of the time designated for workshop to complete, especially where literacy and vision problems were present. Through the direction of the Program Evaluation committee, the forms were shortened significantly to focus on essential data.

### ***2.3 Three month and 1 year follow up calls***

Participants who had provided their consent for follow –up were contacted at the 3 month and 1 year stages following their intervention for phone surveys that focused on participants’ recent falls history since the participating in the program. Participants were also queried regarding their behaviour changes as a result of the program and suggestions for changes in the program itself.

### ***2.4 Falls Evaluation Database***

The falls evaluation database was compiled using all the information from the Participant Evaluation forms and 3 month and 1 year follow up calls. AS the database was populated, the project evaluator provided frequent Data Reports to project staff, steering committee and peer trainers.

### ***2.5 Ambulance Response to Falls Statistics***

The program benefited from having a staff member in Enderby who also worked as an Emergency Medical Technician (EMT). She was able to provide statistics on the frequency of EMT responses to falls in the target communities of Enderby and Vernon throughout the pilot program.

### ***2.6 Focus Groups***

Three formal focus groups were held throughout the program including

- 1 focus group with 6 peer trainers was held in conjunction with their mid-project training.
- 2 intensive focus groups comprised of members of the evaluation steering committee, program staff and 4 peer trainers.
- Two short 1/2 hour project reviews held in conjunction with regular meetings of the NOFPP community steering committee

### ***2.7 Documentation Review***

The evaluation included a review of documents related to the development of the NOFPP falls prevention programs. The evaluator also received updates of steering committee and staff meeting minutes to track key development issues and program responses to these issues. The evaluator drew strongly from “A Best Practices Guide for the Prevention of Falls Among Seniors Living in the Community”, Ministers Responsible for Seniors, September 2001

As indicated by the evaluation methodology above, the summative results in this report arise very much from the ongoing formative evaluation that took place throughout the programs development. The evaluation tools and processes evolved along with the program and 11 separate data reports drawn from the database. An interim evaluation report was produced in the spring of 2003. In addition, the evaluator collaborated with Kylie Hutchinson of Community Solutions Consulting during the last quarter of 2003 to produce a sustainability study of the North Okanagan Falls Prevention program commissioned by the Interior Health Authority. The study focused on key learning's from the NOFPP program and reviewed its potential applicability to communities within Interior Health's region. A copy of the sustainability study can be found at [http://www.socialplanning.ca/seniors/falls/nofpp\\_sustainability\\_study.pdf](http://www.socialplanning.ca/seniors/falls/nofpp_sustainability_study.pdf).

### ***2.8. Analysis***

The evaluation methodology included both quantitative and qualitative methods. The qualitative aspects focused on common themes from a review of program documentation, meeting minutes, interviews with key staff members, focus groups and participant comments in the 3 month and 1 year follow ups. Quantitative data was drawn primarily from the project database which currently contains pre-program participation data on 426 of the total 519 participants in the workshops and the 98 home safety check interventions, including 153 one year follow up surveys.

Analysis of the data and conclusions were confirmed through reviews with Evaluation Steering committee, and program staff. Focus group findings and interim data reports were reviewed with project staff and feedback was received from the BC Injury Prevention Unit. A significant portion of qualitative analysis contained in this report builds on the work completed during the sustainability study described above.

### ***2.9 Limitations to the Evaluation***

While data and feedback that follow demonstrate very strong signs of the project's success, there are a number of limitations to the data gathering and analysis methods that must be taken into account:

*Participant self-reporting:* Participants' pre and post program information regarding their falls is subject to accuracy of their recall. The literature suggests that seniors underreport their actual number and severity of falls due to embarrassment.

*Statistical Reliability:* On a sample size of 153 participants out of a total of 429 respondents provides a margin of error of  $\pm 6\%$ , 19 times out of 20 on the reduction in falls reported in this document. However, these data reported in this report has not undergone a rigorous statistical analysis for reliability.

*Self-selection of participants:* As participation in the falls program was voluntary, results contained here may be biased representation of the senior's population in each community.

*Lack of control group:* Cost limitation and logistics prevented the development of comparison or control group for the program. A reliable comparison with a control group would have increased the confidence that the reduction in falls experienced was due to participation in the program or due other environmental factors.

*Volunteer data collection and input:* Without peer trainers providing the administration and collection of participant information and in the data entry process, the depth and breadth of information collected would not have been possible. However, while standardized training was provided to peer trainers to administer questionnaires, a degree of divergence in how the pre and post surveys were explained and administered was expected. As well, seven different volunteers were involved in the administration of follow up surveys and data entry. While survey administration and data entry were fairly linear processes with few opportunities for divergence in process, periodic reviews of the data revealed some data corruption, which required correction.

The remainder of the data in this preliminary report is based on 426 respondents of 617 total participants in the program (519 participants in the workshops and the 98 home safety check interventions). This translates into a baseline data for 69% response rate of project participants.

Of the 426 respondents to the evaluations

- 125 (29%) have taken the Falls Prevention Workshop
- 68 (16%) have taken the Med Review Workshops
- 358 (82%) have taken the Combined Workshops
- 9 participants reported to have taken both Med Review and Falls Prevention Workshop
- 9 participants reported having taken all three workshops
- 7 participants reported having taken the Combined workshop twice
- 75 participants have taken part in the Home Safety Checks with one participant receiving the intervention twice due to a move half way through the pilot.
- 14 of the participants of the Home Safety Check participants also report having taken at least on workshop.
- 60 veterans participated in the program, of which 32 were female and 28 were male
- 47 spouses of veterans participated in the program, of which 37 were female and 10 were male

Additional demographic breakdown of participants including sex, income, and education is contained in Appendix 3

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#### 4. BACKGROUND DATA

The following table outlines the numbers of participants in the North Okanagan Falls Prevention Project

**Table 4a**  
(Enderby –E Vernon – V)

	<b>Jan - Mar 2004</b>	<b>2003</b>	<b>2002</b>	<b>2001</b>	<b>Total</b>
VAC & HASI V (02 Falls Fair V)		90	252	510*	852
VAC & HASI- E Falls Fair E	110	5 220	223	600	1153
Health Fair Armstrong		50			50
(2)Falls Prevention Workshops V		N/A	124		124
(2)Falls Prevention workshops – E		N/A	45		45
(2)Meds Workshops –V		N/A	78		78
(2)Meds workshops - E		N/A	25		25
Combined workshops – V	3 workshops 47 participants	10 workshops 145 participants	0		192
Combined Workshops - E	1 workshop 7 Participants	48 Participants	0		55
Home Safety Checks - V	13 Homes 29 participants	48 Homes 52 Participants	6 Homes 8 Participants		67 89
Home Safety Checks -E	1 1 Participant	8 participants 8 Homes	0		9
Presentations- V Speakers Bureau	1 with 19 participants	75 Participants 5 presentations	332		426
Presentations– E Speakers Bureau		68 participants 7 presentations	0		68
Volunteer hours					3,000
<b>Total # of Participants</b>	<b>213</b>	<b>761</b>	<b>1087</b>	<b>1110</b>	<b>3171</b>

- \*2002 figure included 275 at the Vernon Fair. 135 at the Vernon Flu clinic and 100 seniors were given kits at the Lumby Health Fair 2001
- (1) Information day at Community Health Centre. 25 FP kits handed out
- (2)FP workshops and medication workshops were combined in 2003.

## 5. PROGRAM RESULTS

### 5.1 Participant Changes in Attitude Towards Falls

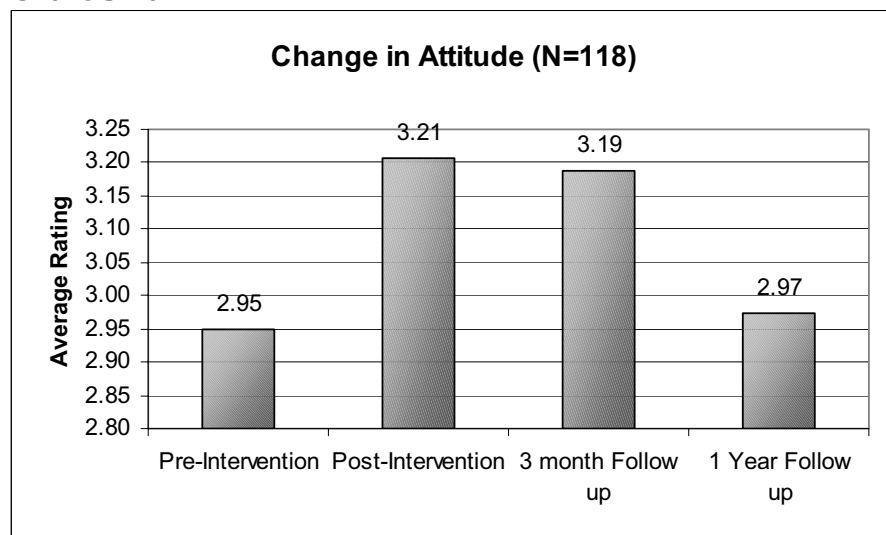
The ability to change behaviour is a prerequisite to actual changes in behaviour. The participants in all the workshops were asked the following question:

Do you think you can avoid falling down, as you get older? (Please circle one)

<b>Never Avoidable</b>	<b>Sometimes Avoidable</b>	<b>Frequently Avoidable</b>	<b>Most Often Avoidable</b>	<b>Always Avoidable</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

The following responses were recorded at the beginning of the workshops (Pre-Intervention), immediately following the workshop (Post-Intervention) and through a 3-month and year follow up phone survey.

**Chart 5.1a**



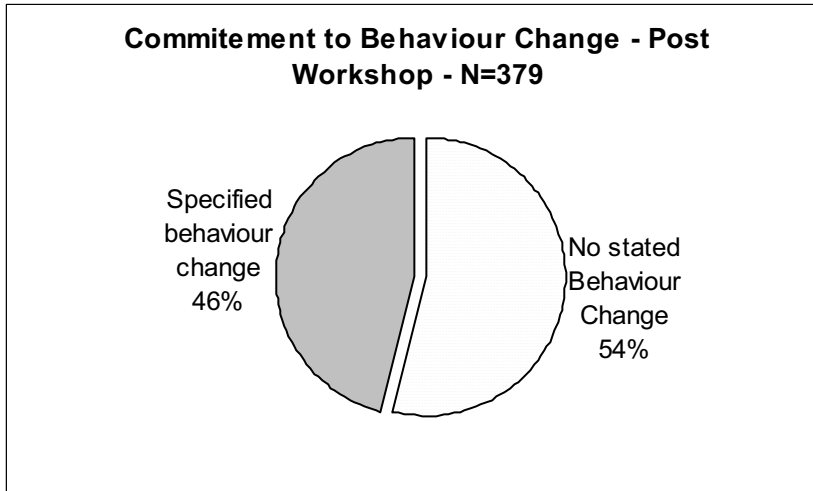
N=118 respondents who answered the same question at each at the pre and post intervention questionnaires, and in the 3 month and 1 year follow up.

While the program interventions appeared to have a short-term positive affect on the participants belief in their ability they can make changes to avoid falls, this change in attitude appeared to erode within one year following the workshop.

## 5.2 Participant Changes in Behaviour

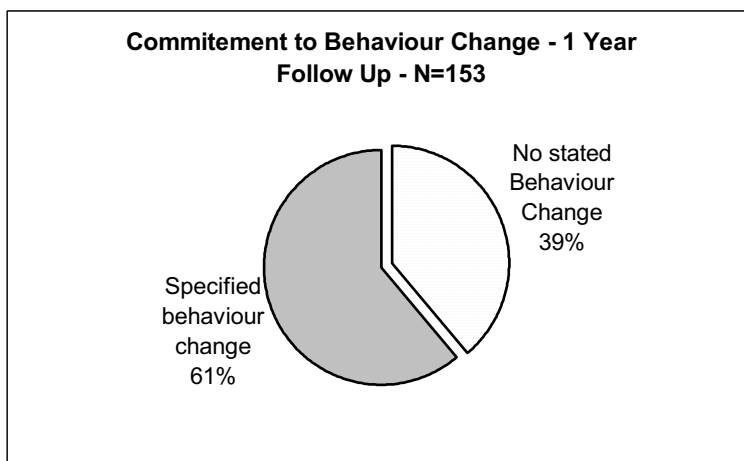
Immediately following the workshop, participants were asked "What changes do you plan on making to prevent falls after today's workshop. Forty-six percent (174 out of 379) of participants identified at least one specific behaviour changes they were going to make as a result of the workshop.

**Chart 5.2a**



Interestingly, in response to the question "Have you done anything differently in the last year to prevent falls as a result of the workshop?" 61% (93 out of 153) of respondents to the 1 year follow up survey describe some kind of behaviour change. Specific stated behaviour changes ranged from general statements about being more careful about falls, to more specific references to removing home hazards, purchasing ambulatory devices and shoes, changing gait and exercise.

**Chart 5.2b**



## 5.3 Home Safety Checks

The stated objective of the home safety check was to "Reduce one or more home hazards amongst 50% of clients of the Home Safety Check in Vernon and Enderby by 2003"

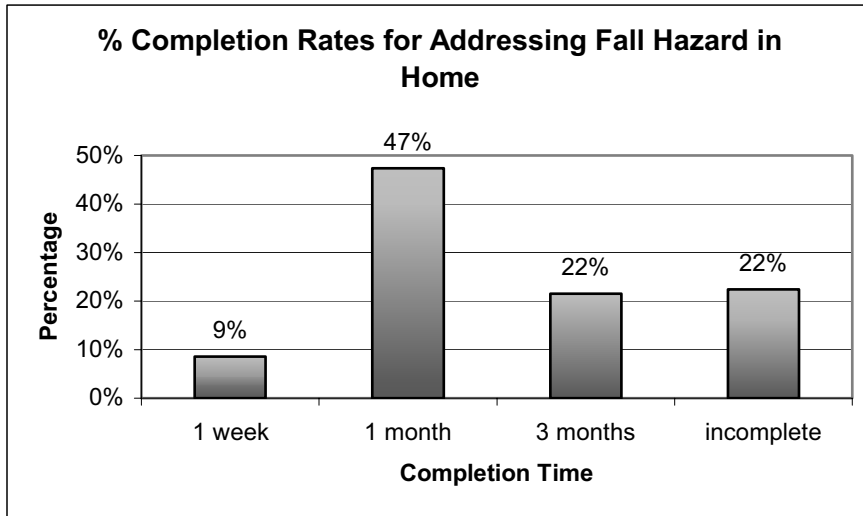
Participants in the Home Safety Check intervention were asked to commit to at least one home modification that would reduce falls hazards in their home. The following table outlines the home modifications committed to by Home Safety Check participants at the end of each intervention.

Table 5.3a

<b>Home Modification Priority</b>	<b># of Households</b>	<b>Home Modification Priority</b>	<b># of Households</b>
Improve lighting/switch access	23	Remove/Cover Extension cords	3
Fix Steps/stairs/deck/walkways/rails	22	Repair carpet	3
Install Tub Grab Bars/Skid Mats	20	Chair with rests	2
Flashlight	12	Remove clutter	2
Remove Loose/Scatter rugs	11	Adapt rocking / swivel chair	2
Move/Adjust Furniture	9	Improve/protect tubing for oxygen machine	2
Purchase Step Stool/Bench	9	Right wiring, taps etc	2
Install ramp for entrances door	9	Roof leak over entrance	2
Relocate phone/buy cordless	7	Bathroom adaptations	1
Hand held shower	7	Lower items from high kitchen cabinets	1
Dangerous door threshold/sills	6	Move thermostat or replace it	1
Subscribe to Lifeline	5	Pulley lift for hot tub cover	1
Elevated Toilet Seat	4	Door Security	1
Improve access to fire extinguisher	4	Move Medications	1
Install Safety pole	3		

Of the 75 Home Safety Checks completed by March 31, 2004, 49 of the participants have completed a 3 months follow up call in which they were asked if they had addressed the fall hazards in their home which had been identified by volunteers. These 49 participants had made a commitment to addressing a total of 116 separate falls hazards for an average of 2.5 hazards identified per home. As identified in Graph 5.3a, 78% of participants (the sum changes made within one week, 1 month and 3 months) had addressed a minimum of 1 home safety hazard in their homes within three months of participating in the intervention.

**Chart 5.3a**

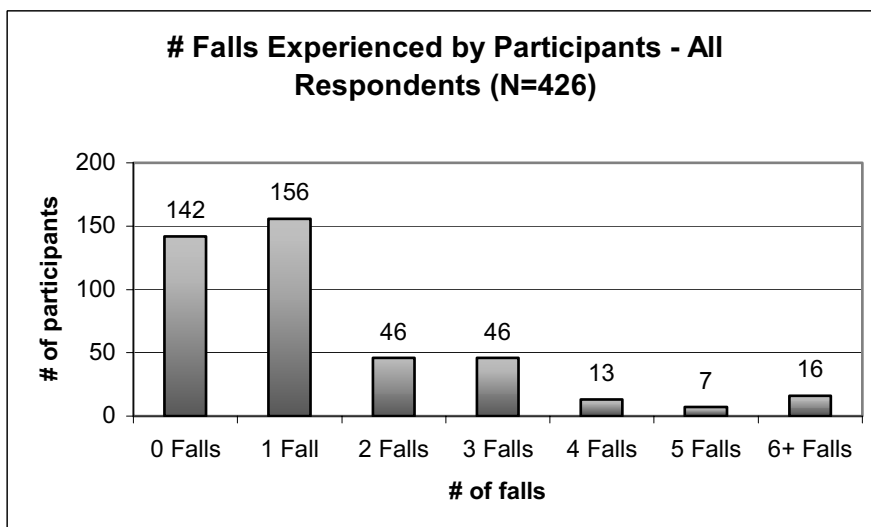


The most common reasons cited for incompleteness were that modifications were underway or that they were awaiting the results of their HASI grant application to finance the more costly modifications. Some participants had chosen to conduct modifications other than those committed to, while still others refused to answer follow-up questions. One participant did not complete any modifications as she decided to move to a supported living residence. Another described her imminent death as the reason for not completing the modifications.

**5.4 Participants Fall History**

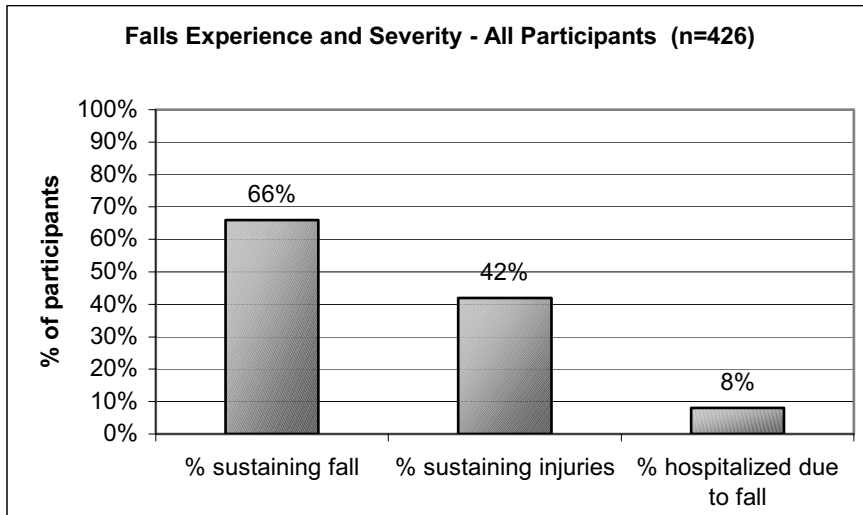
Chart 5.4a describes the number of falls experienced by participants in the year previous to participating in the program.

**Chart 5.4a**



Two thirds (284 out of 426) of participants completing an initial questionnaire recalled falling at least once in the year prior to their participation in the program (Figure 3). Of these, 42% sustained an injury and 8% required hospitalization.

**Chart 5.3b**

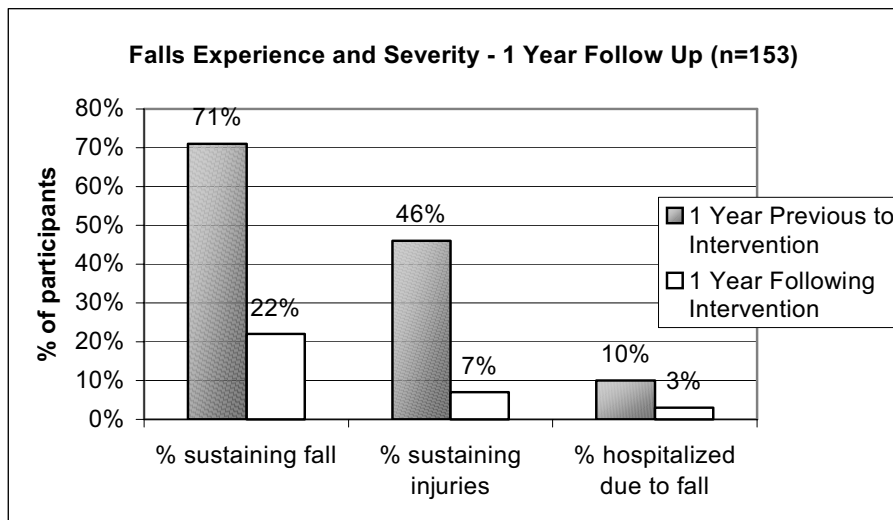


The average age of those who had experienced a fall that caused an injury was 75.3. The average age of those who had experienced an injury that required hospitalization was 86.3.

**5.5 Type of Injuries Sustained**

The reported injuries that required hospitalization are reported in the following chart.

**Chart 5.5a**

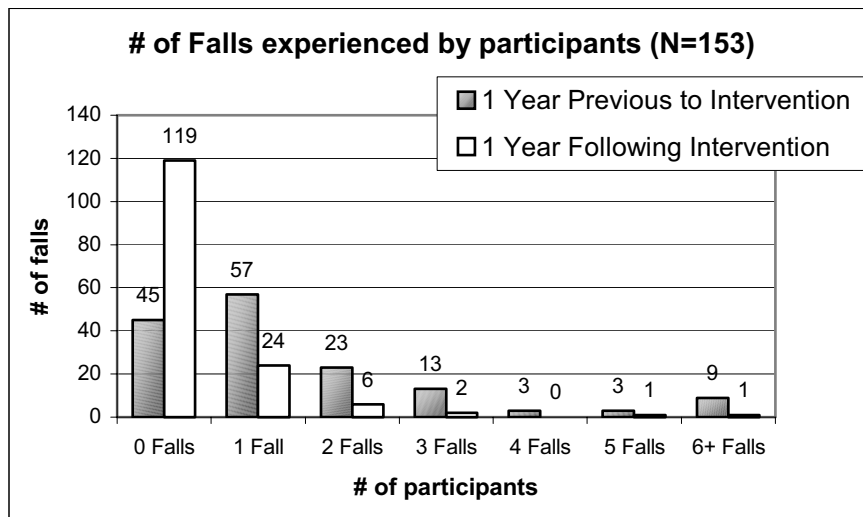


2 participants requiring hospitalization did not describe their injury

### 5.6 Changes in Participants Fall Patterns

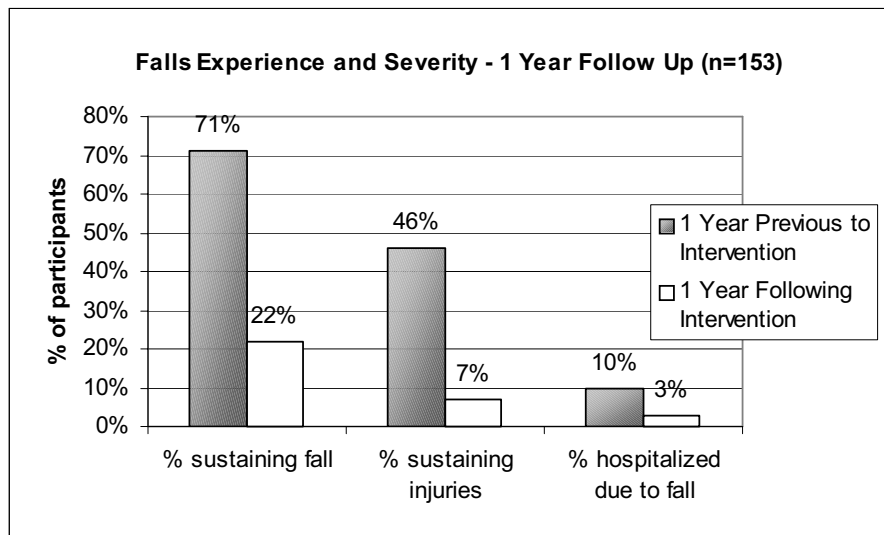
One hundred and fifty three (153) participants who were contacted for follow survey one year following their participation in the program. As chart 5.6a demonstrates, participants self reported a significant reduction in the number and the frequency of falls. In the year previous to participating in the program, participant has experienced an average of 1.6 falls in the previous year. One year following the program, participants had experienced an average of 0.4 falls; representing a 75% reduction in the number of falls overall.

**Chart 5.6a**



In addition to a reduction in the number of falls overall, participants also reported a reduction in the number of injuries and need for hospitalization as a result of injuries. Of the 153 participants responding, 46% reported some form of injury as a result of a fall with 10% reporting an injury that required hospitalization. One year later, only 7 % of this same sample of participants reported an injury from a fall, with 3% requiring hospitalization.

**Chart 5.6b**



These results demonstrate a:

- 69% reduction in the number of seniors who report sustaining at least one fall over one year
- 85% reduction in the number of seniors who report sustaining injuries as a result of a fall(s)
- 70% reduction in the number of seniors who report requiring hospitalization due to a fall(s)

### **5.7 Potential Cost Benefits of the Program**

While this evaluation has not involved a rigorous cost-benefit analysis, it is a worthwhile exercise to examine approximate cost-savings. According to Smart Risk<sup>d</sup> currently the best available source of economic data on the cost of falls in BC, the average cost of a fall requiring hospitalization was \$8,805.9 and \$412 for a fall with injuries not requiring hospitalization.

Using the above figures and the program's one year follow-up data (n=153), the percentage of participants who report sustaining falls requiring hospitalization dropped from 10% to 3%, which represents a minimum cost savings of \$94,311. Similarly, the percentage of participants sustaining falls with injuries not requiring hospitalization decreased from 46% to 7%, a savings of roughly \$24,584. If these findings were extrapolated across all 617 program participants to date, \$380,286 would have been saved through a reduction in hospitalization due to falls and \$99,129 through the reduction of non-hospitalized injuries, for a projected total of at least \$479,415 in direct health care savings for one year.

These figures assume only one fall per participant and may be higher if more than one fall occurred over the year. They are also almost certainly higher if a hip fracture is sustained. They

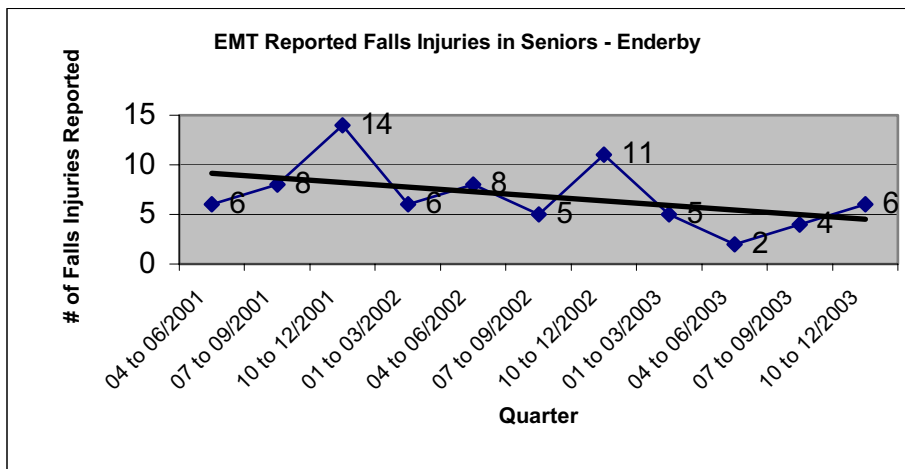
<sup>d</sup> SmartRisk. (2001). *Economic burden of unintentional injury in British Columbia*. Vancouver, BC: BC Injury Research and Prevention Unit.

also do not include the additional non-hospital costs associated with a fall such as physician costs, increased home care, and costs to the family, among others. Neither do these projections account for any echo effect of the program, i.e. a reduction in falls by seniors who did not participate in a direct intervention but who may have been exposed to the falls message through the strong community presence of the program via community presentations, media announcements, knowledge transfer from program participants to non-participants, etc.

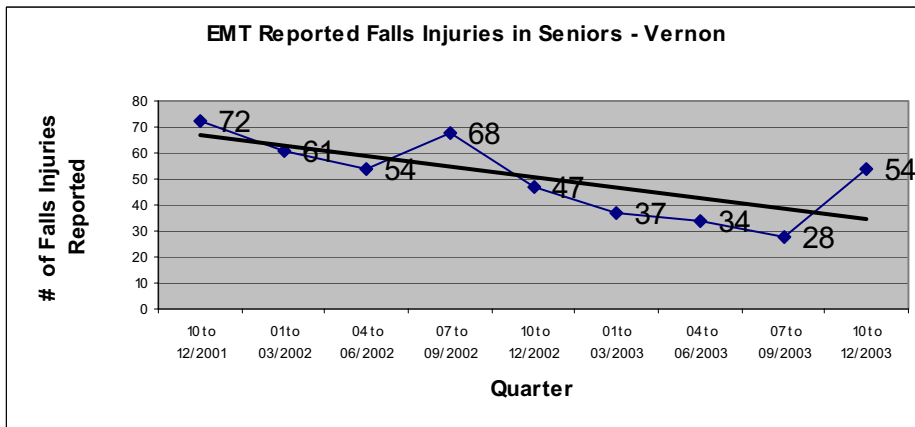
### 5.8 Project Echo Effects

One potential indicator of the Falls Prevention Program's echo effect into the wider community would be the reported 3 of falls in the wider community. The following statistics tables outline the Emergency Medical Team responses to calls due to falls by seniors in the Enderby and Vernon Service areas. The trend lines indicate a gradual decrease in the # of calls to EMT services due to falls since the NOFPP program began in the second quarter of 2002 (04 to 06/2002)

**Chart 5.8a**



**Chart 5.8b**



## 6. PROGRAM STRENGTHS

Feedback from project participants, peer volunteers, and project staff on the North Okanagan Falls Prevention program reveals several factors contributing to the program's success, including:

**Peer Delivery:** The interventions in the program are based on peer education and modeling. These interventions are highly interactive, where peer facilitators discuss their own personal falls history and prevention strategies, and involve participants in doing the same. Participants in the program felt that the peer-led workshops were less threatening and more credible than those provided by professionals.

**Community Capacity-Building Strategy:** The NOFFP is a successful model of a community capacity-building approach to population health. As opposed to having the program pre-designed and packaged for delivery by health care professionals in a top down manner, the NOFFP has used a grassroots, bottom-up approach. Seniors have been involved in every aspect of the design, implementation, and evaluation of the NOFFP. While the program volunteers consistently recognize the guidance, experience, and approachability of program staff as key factors in the success of the program, project staff see themselves as serving seniors and the community first and consulting with them on every step of the program's development. While the highly consultative nature of this development strategy may take longer, it has served to create a remarkable sense of community ownership of the program amongst partner agencies, staff, peer facilitators, steering committee members and program participants. This consultative development process would not have been possible had the project not had multi-year funding, avoiding the accelerated development processes characteristic of many short-term pilot projects.

This capacity-building approach is consistent throughout the program and crucial in persuading seniors that they have the ability to prevent falls themselves. Another key empowerment strategy is the self-selection of program participants, i.e. seniors are participating in the program because they are ready for change.

**Multi-faceted Approach to Falls Prevention:** Best practices in population health indicate that multiple strategies directed at a wide range of risk factors are effective in reducing injuries from falls. The NOFFP uses such an approach, combining large group workshops with individual interventions, supplemented by a pervasive media campaign and public speaking engagements. The interventions are conveniently brought directly to the target population in seniors' centres or in their residences. There are also indications that the evaluation process itself formed part of this multi-faceted strategy. In addition to collecting falls history data, the follow-up calls served to reinforce the program's learning's and provided an opportunity to recruit seniors for participation in the home safety checks.

**Leveraging the Connections and Experience of the Host Agency:** Through the SIRB, the Social Planning Council for the North Okanagan has been able to integrate the NOFFP into a pre-existing social network in the participating communities and leverage its long and credible history in the community with the program's target population. The agency has been able to capitalize on long established partnerships with local stakeholders, nurturing a common purpose and commitment to falls prevention among senior's organizations, local government, media, churches, etc. More importantly, it has been able to draw on its experience as the host of the

Volunteer Bureau in the recruitment and training of volunteer peer facilitators for this project. The program was also well-positioned to access the SIRB's knowledge of local resources and expertise thus facilitating the linkage of participating seniors to a range of parallel health supports, including subsidies for home modifications and safety equipment, and connecting them with appropriate health care professionals.

**Strong Support to Volunteers:** Program participants consistently commended the quality of the program volunteers, many of whom are retired or semi-retired health care professionals. Respectful and timely staff support to volunteers, combined with periodic training opportunities, has led to a remarkably low turnover rate of peer volunteers and steering committee members. This is particularly notable since many other Health Canada/Veterans Affairs Canada projects experienced difficulty recruiting and retaining volunteers (EKOS Research Associates, 2003). Since its inception, the NOFPP has leveraged approximately 2500 volunteer hours.

**Success in a Small Rural Community:** The Enderby program steering committee felt that the program had a very high profile and achieved strong penetration into the community's senior's population. The project also enjoyed strong municipal support with the current mayor as a champion, which led to council dedicating \$25,000 towards reducing falls hazards in public areas. The local newspaper provided extensive coverage of the program and the seniors groups in the community were highly involved in promoting and hosting the program workshops. An Emergency Medical Technician was hired as a coordinator one day a week, which gave the program a strong local rooting. Due to her other professional duties, the co-coordinator was also well connected to other health care staff. The Enderby Community Health Centre hosted the program, allowing it to develop strong links with the local Geriatric Support Program.

## **7. PROGRAM CHALLENGES**

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**Lower Number Of Home Safety Checks:** The Home Safety Check (HSC) component of the program took significantly longer to implement than had been planned. This delay is in part due to the resource intensive nature of the HSC, The development and testing of the HSC tools, protocols and participant training took significantly longer to develop than had been planned, partly due to their resource intensive nature, and concerns around the liability of volunteers entering the homes of seniors. In addition to extended development time, referrals to the HSC program were initially low. By December 2003, 61 out of a project the program's goal of 100 HSCs had been completed. Frequent presentations with Veterans Affairs Canada area counselors and Interior Health Community Care workers have not translated into the number of referrals anticipated. Another barrier was the lack of information provided to seniors by referring agencies, resulting in confusion when the program coordinator would call to set up Home Safety Checks. Volunteers also cite growing concerns amongst seniors for their own safety and fear of home repair scams. These fears appear to have been allayed in part in Enderby by emphasizing the option to have another person present during the home visit to potential participants. As well, staff are having success recruiting more home safety check participants during follow-up phone calls to participants of the Falls Prevention Workshops. These late strategies appear to be

working as at the time of this report, 75 have been completed with 28 more scheduled to be completed by DATE.

**Involvement of Health Care Professionals:** While the program has enjoyed general support from health care professionals, especially during the program's initial development and on the project steering committee, support from front-line health care staff on the whole has been poor. There have been a relatively few direct referrals from physicians, pharmacists or physiotherapists. NOFPP staff have made a number of presentations to Home & Community Care units in Vernon with no known referrals having occurred to date. While the Quick Response Team has called the program to refer discharged patients, most seniors referred were unaware that a referral had been made when NOFPP staff followed-up on these referrals. The low number of referrals from professional health care staff may stem from concerns that a volunteer-based program should not replace paid health care. One way of overcoming this resistance has been demonstrated in Enderby where Geriatric program staff received a full orientation to the program and observed a workshop and home safety check. The NOFPP interventions were presented as a complement and not a replacement to the Geriatric program, which has since resulted in a good working relationship with the NOFPP.

**Reaching Isolated Seniors:** Further strategies and tools need to be developed to ensure more contact with isolated seniors in the community, with a specific focus on connecting with Interior Health's Home & Community Care program in a complementary fashion and with family caregivers.

### **Opportunities for Program Dissemination and Learning**

The most pointed success of the NOFPP falls prevention program has been that Interior Health has recognized its benefits and granted it ongoing funding:

- Requests for support in developing their own falls prevention program have been received from 11 communities.
- The Okanagan and Spallumcheen Indian Bands have requested that the program be adapted for their seniors, providing a unique opportunity for testing the model with aboriginal populations.

## **8.0 CONCLUSIONS AND RECOMMENDATIONS**

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On the basis of this summative evaluation of the North Okanagan Falls Prevention Project, the consultant concludes that program is a strong example of the potential of a community based population health initiative for improving health outcomes for a specific target population. Since program interventions began in May of 2002, 519 participants in the Falls Prevention Workshops and 89 participating in the home safety checks. The preliminary results show that out of the seniors who have participated in the program there has been a

- 70% reduction in falls
- 77% reduction in the number of injuries as a result of falls
- 57% reduction in falls related injuries
- Over 3,000 volunteer hours leveraged by over 70 community volunteers

The 57% reduction in falls related injuries requiring hospitalization resulting in a potential direct cost savings of \$218, 569, with the reduction in overall falls injuries saving an additional \$29 015 for a total cost savings of \$247 584 amongst the participating seniors population.

On the basis of the evaluation, the evaluator recommends the following 5 key recommendations:

**1) Develop specific strategies and tools to involve more isolated, high-risk seniors in the community.**

The elective nature of the program, whereby seniors chose to participate, meant that large majority of seniors who participated were active community members with relatively low mobility issues, and with pre-existing connections to seniors groups and supports. One component of this strategy would be to identify "at risk" indicators for falling that could be used as a screening for participation. Further integration and support with hospital discharge, and home care and home support workers and agencies would also aid in accessing isolated "high risk" seniors. Messages for attracting more isolated seniors should emphasize be placed on seniors remaining independent longer, rather than directly on falls risks or strategies. Isolated seniors may be more likely to participate in the program if they make the connection with extending the control of their lives, allowing them to live in their own homes for as long as possible.

**2) Maintain the program within an established community agencies**

A key component in the success of the NOFPP was long history and track record of the Seniors Information Bureau. While SIRB is unique in its combination of volunteer programming and direct connection to the target population through the Seniors Information and resource bureau, anchoring similar community based programs in an existing agency is vital to the community capacity building approach of the program.

**3) Pursue active involvement of health professionals early on in development of the program and integrate the program with service delivery**

The closer involvement of health care professionals in training the Enderby project illustrate those advantages especially for isolated seniors. Taking this process a step further and integrating the program interventions more directly with health care professionals could serve to decrease resistance to the volunteer nature of the program, increase overall referrals, and importantly, increase access to isolated seniors.

**4) Include an exercise component to the program**

Best practices indicate that exercise programs are one of most effective methods for reducing falls. Staff are considering the inclusion of an exercise component to the program as a suitable complement to the current array of interventions. Strengthen links or partnerships with existing community exercise and rehabilitation programs may also help improve outcomes.

**5) Conduct more rigorous cost benefit evaluation of community based programming**

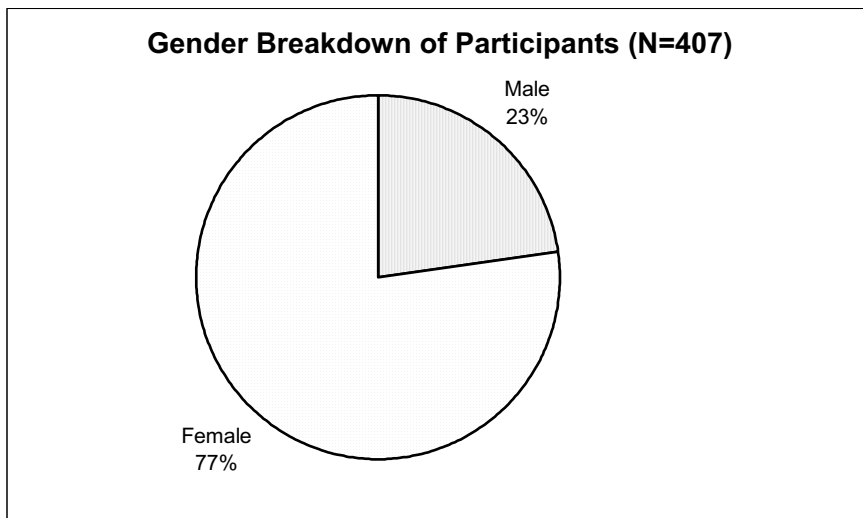
While the figures presented in the report provide strong indications of the cost savings to medical services, a more detailed and statistically valid analysis of the causal link between the program results and cost savings for medical services is required. While community based programs such as the North Okanagan Falls Prevention program do not traditionally have the resources for such an extensive review, valid cost benefit studies are crucial component in securing longer term funding.

## APPENDIX I: PARTICIPANT DEMOGRAPHICS

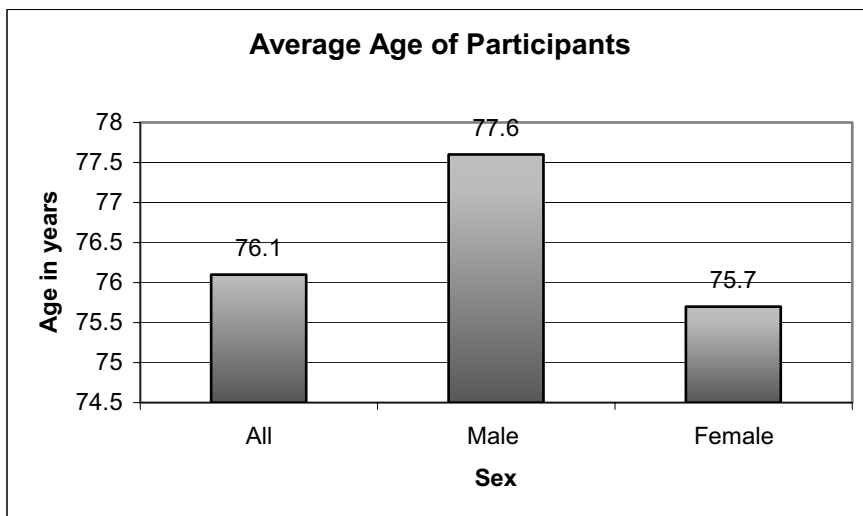
The following figures and graphs provide a more detailed demographic breakdown of program participants, as well as some cross tabulation of these breakdowns with participant's falls experience.

- The total average age of participants was 75.7 with a mode of 77
  - 60 participants report being Veterans (28 males, 32 females)
  - 47 participants report being spouses as of a veteran
  - 8 participants in the workshop interventions were either paid or informal caregivers.
- While these participants were positive of the overall program, their responses were not included in this report

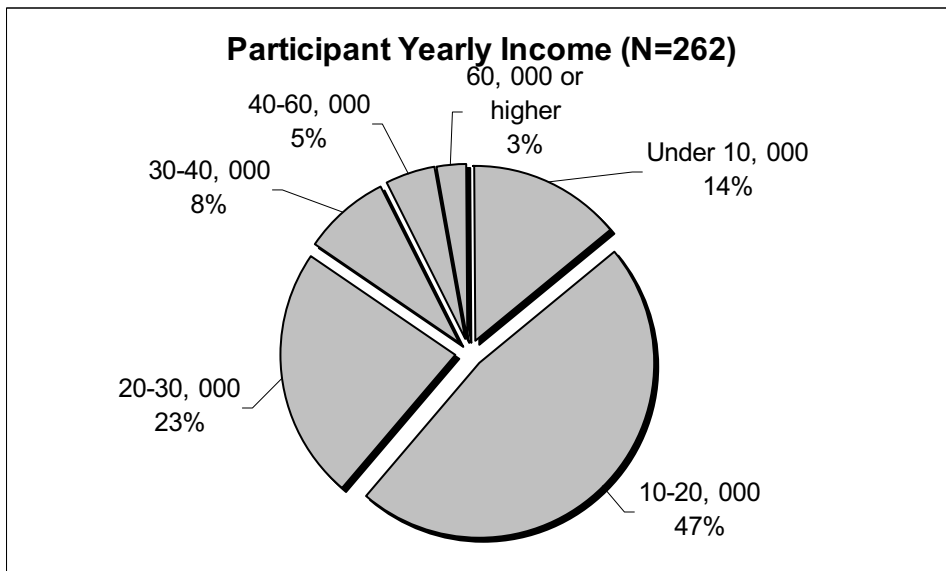
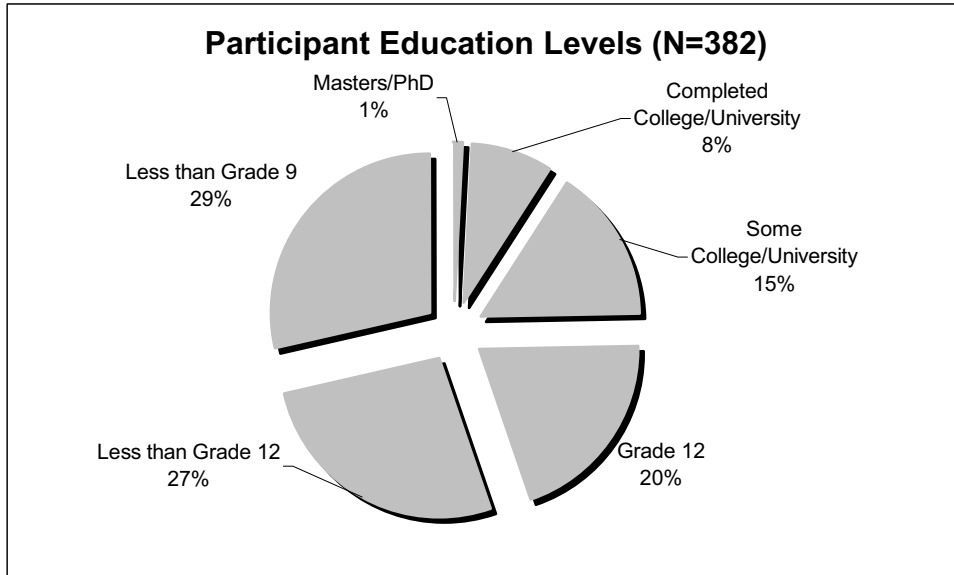
**Chart Ia**

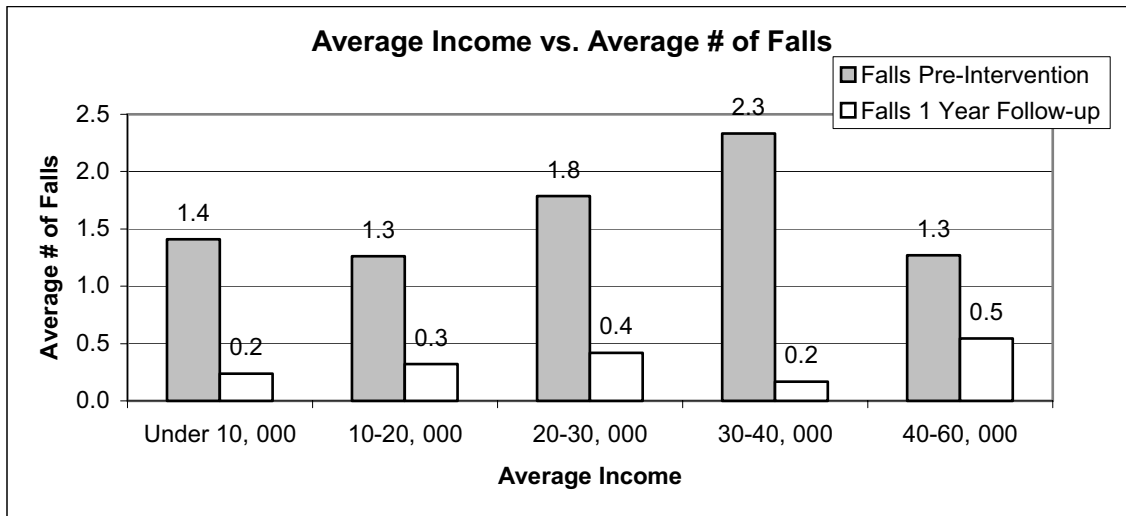
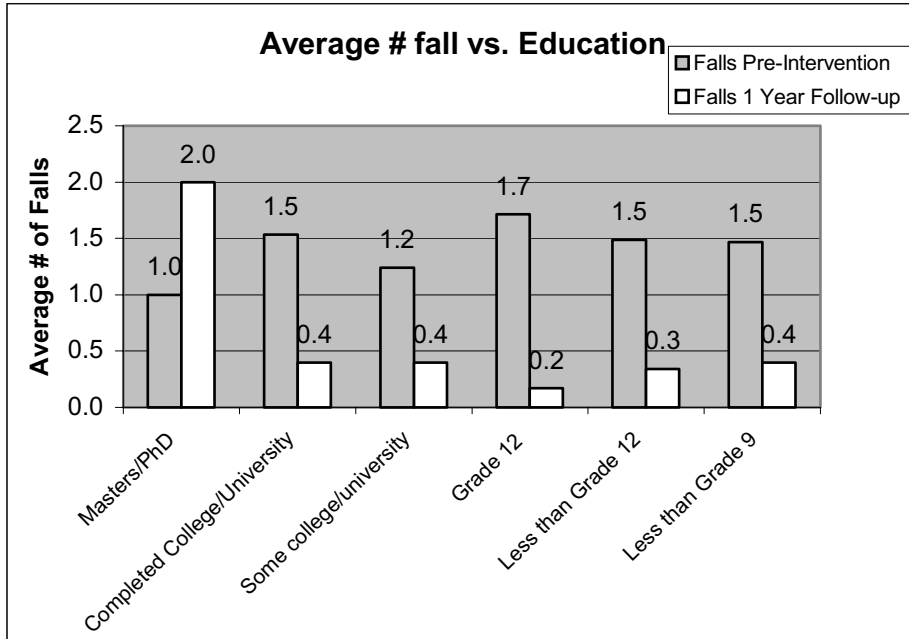


**Chart Ib**



The average age of the female participants was 75.5 years, with a mode: 76  
95 males participated Average Age Males; 76.7 Mode: 79





## **APPENDIX II: Factors in the Success of the North Okanagan Falls Prevention Program**

### **Steering Committee Rating September 19<sup>th</sup>, 2003**

Program Steering Committee members were asked to rate various components of the program as to their importance in the overall success of the North Okanagan Falls Prevention Program. Fourteen respondents reviewed potential factors, each rated on a scale of 1 to 12, with 12 being the most important and 1 being the least important factor in the program's success. The following table outlines the overall results of these scores.

<b>Program Factor</b>	<b>Rated Score (1 to 12)</b>
Peer group supported training	105
# Of volunteer hours leveraged	99
Financial support for the program	88
Repetition of message, planned and unplanned	78
Community based support for the program e.g. senior agencies	76
Program staff abilities	47
Quality of the volunteers (many with health backgrounds)	45
Support of medical professionals, doctors, physio, etc.	31
Overall media presence	29
SPCNO experience with target population	17
Technical Support of Health Canada	9

**NOFPP Evaluation Committee Focus Group Results  
September 28<sup>th</sup>, 2003**

**Participants:**

- Retired Adult Educator
- IH Injury Prevention Coordinator
- Enderby Community Health Centre Coordinator
- Two project Staff
- 4 Project Volunteer Peer Educators

**Methodology:** Using multi-voting technique, Participants were asked to privately identify responses to a series of questions. The responses were then shared to the entire group, clarified, and then voted upon in two round of voting to identify priority responses.

1. **Question:** The preliminary data on the reduction in falls amongst program participant indicate that the program has been a success. What are the critical components/activities of the program (explicit or implicit) that have made it a success? (Nominal Group Techniques was used to solicit responses and vote on results.)

<b>Component/Activity</b>	<b>Rating 1</b>	<b>Rating 2</b>
Guidance of SIRB staff, their approachability, training and experience of staff, credibility in the community	11	16
Multiple intervention approach	10	9
Empowerment of the individuals attending – empowered them to change	6	7
Community Support/ participating, volunteer program, local government, media, volunteers in many parts of community, churches, less territoriality, network	4	6
Multiple year funding which allows time to develop credibility	6	5
Interactive fun nature of workshops, well prepared	4	5
Risk taking by staff/volunteers – openness	6	
Quality of the volunteers teaching the workshops	3	
Committed to learning	3	
Supportive funders – quality of assistance and presence	2	
Gelling of teams – staff and volunteers, ownership of the program, consistent # at meeting, longevity of commitment	2	
Connection to community services – organizational connections	1	
High visibility of project		
Local community based volunteers		
Trained peer volunteers		
Streamlining of the interventions		
Amount and quality of printed information – sound research behind it		
Intervention of the home inspections		

Well thought out program		
Paid coordinator		
HASI program		
Program is self selected		
Non-threatening delivery		
Media promotion including publicity of falls		
Commonality of problem solving and sharing		
Guidance for seniors to reduce medication in medication review workshop		
Buy in by health authority and other partners – financial linking		
Implementation geared to each community		
Balance between community volunteers and health professional		
Wellness approach of the program		
Reaching isolated individuals		
Duo community approach		
Met a need		

2. **Question:** Research has show that there is little evident whether or not education program alone are effective in modifying fall risk factors or are effective in reducing falls or fall-related injuries. At first glance, the NOFPP program would appear to be an education program, how could it have achieved the success that the preliminary data suggests?

#### **Responses**

- Community based nature of the program – tied into existing resources, agencies and relationships
- Empowerment – the message is consistent in that seniors have the ability to prevent falls themselves.
- Peer approach – presentation is less threatening than when provided by professionals, information seems credible when coming from other seniors
- Motivation of participants – participants are self selecting, they choose to participate
- Follow-up – repetition of the message in the follow up calls
- Constant message in the media – the program was well covered in radio, TV and newspapers.
- Personal contact – the peer approach made things personal, especially in the home safety checks
- Education is different from learning, this is a learning program – the workshops and home safety check involve the participants directly
- Collaborative approach – the partnership behind the program gave the program a strong presence in the community
- Re-education – relearning –many participants described that the information presented was reinforcing what they had already known

3. **Question:** What components of the model need to be considered for the program to be replicated in other communities?

**Responses**

- Keep the Population Health thrust of the model
- Cost benefit of leveraging the volunteer resources
- Grassroots organization hosting the program/Grassroots approach of the coordinator
- Integrate into the existing network in the community e.g. integrated into the network of the Enderby Community Health Centre
- Link up with other primary health care initiatives e.g. the Chronic Disease management program put on by SPCNO
- Agency must have a preexisting connection with the target population base
- Maintain the “learning” or “empowerment” model

**NOFPP Evaluation Steering Committee Questionnaire Results**

1. Why do you believe the NOFPP program has been successful?

1	IN the short time as a volunteer, awareness and education of how to prevent falls has been expressed as the most common comment (by participants)
2	It is directed towards people who really need it
3	<ul style="list-style-type: none"> <li>• Peers training peers</li> <li>• Dedicated staff</li> <li>• Excellent training materials</li> <li>• Financial support/“ownership” from many sectors</li> </ul>
4	Peer support – very high level of involvement by volunteers, support by health care staff and funders Multiple year approach
5	Preliminary stats indicate there has been an effect and decrease in the number of fall, injuries and hospitalization
6	Because of program visibility Program content
7	The workshops serve as a reminder to people of the need to be more aware of their risk of falling. In the case of med review workshops, there is usually new information important to participants
8	Great team work, right person for the right job, great support form funders, Mike’s networking contacts solid prior to starting, commitment of volunteer and steering committee, media readiness. Community based, community support, openness for feedback and implementation of change, ownership by individuals and ownership by team of staff, community and volunteers

2. What positive program results have there been that you haven't expected?

1	The overall excitement expressed. The amount of action taken in the home was achieved.
2	The high dollar savings from the falls prevented
3	I guess I didn't expect the large reduction in numbers (of falls) –according to our preliminary reports
4	Quality of the peer trainers, commitment of these volunteers First nations of OK band have a real grasp of the program
5	Related to time, didn't expect results to be measurable so quickly
6	Changes in attitude with civic officials about the safety of citizens, sidewalks, etc.
7	The response from participants of the workshops. In every single workshop they've been very active in interacting with facilitation and each other
8	Major home repairs for seniors with low incomes High # of participants making changes Longevity of volunteers committed to the program

3. Is the project reaching its intended audience? Why or why not? What changes must be made to reach intended audiences more effectively

1	Not sure at this time. Brainstorming new approaches to reaching the more seniors who are not involved in community events.
2	I think it is but we need to get the people who have been helped to become more involved in promoting the program
3	We don't seem to have reached the veterans and I'm not sure why this is. And are we really reaching the most fragile at risk seniors. I don't know
4	Yes, however our veteran clients are more by luck than good referrals. We need home care personal to identify those at risk and refer to the program
5	It seems to be. Not reaching professionals and perhaps need an education blitz within IH
6	Not always. There is a certain segment of Vernon Seniors that come to any presentation or workshop as an event, but yet in Enderby the participants are more influenced by the information in the program and are willing to make changes.
7	We're reaching groups but there must be a lot of individuals out there that would enjoy and benefit from the workshops
8	I'm concerned about reaching isolated seniors, it could increase with referrals through IH employees Information maps of homes on falls hazards and prevention with falls prevention recommendations for seniors complex's common rooms, laundry, bulleting boards, rec rooms, etc

4. What are the characteristics of project staff that have made this program successful? What areas could they improve upon?

1	Warm, respectful approach
2	I think they are doing a fabulous job
3	All staff are exceptional. They are knowledgeable, approachable, creative, organized and are open to new ideas. They have done a remarkable job of integrating volunteers and health professionals
4	Very dedicated, knowledgeable and professional. Kelly, Elaine and Louise
5	Commitment People skills Knowledge of the program
6	Always available. Wonderful support can provide an information session on short notice. Very well informed about the project and most accommodating. Will make changes to reflect the needs of the program quickly
7	I've primarily worked with Elaine but with both Kelly and Elaine. Their attitudes foster a positive atmosphere for both workshops and interaction with volunteers
8	Mike excellent admin, budget, networking, keeping program on track thru check ins, etc. Team focused "our program" Kelly – great at program development of material, professionalism, team play, regular meetings, great at incorporating changes Louise – very connected to community, involved in onset of program, well liked by volunteers

5. How effective is the organizational structure of SIRB/SPNCO in supporting this project implementation? What changes need to be made?

3	It's a natural fit
4	This has been the glue that holds the whole project together
5	Difficult to respond as an observer. I'm biased in favour of SIRB/SPCNO. Presentation work valuable +++++. Also, flexibility and commitment to community best interests. It would be nice to have an Enderby "Branch" but would it be practical to provide financial support
6	Without it the project would not have nearly as high profile in our community SPCNO/SIRB took advantage of many opportunities to link with other health related events to publicize the Falls project
7	Very
8	Extremely, community based, could have used a training room/meeting room. SPCNO's unsettledness may be a deterrent

6. What were the most successful components of the volunteer training for this program?  
What could be changed?

1	I had prior knowledge coming into volunteering from the FFP program
2	Medication Review and Home Inspection
3	Can't answer
4	Very detailed and well thought out trainers' kits. We could have regular meetings of volunteers to share and debrief. I'm not sure one day of training is enough
5	Creation of teams for the home safety checks and workshops. Good media coverage locally
6	Organization Content Very well delivered to the trainees
7	Letting the new volunteers practice, practice, practice in front of their peers
8	Base of materials Quality of volunteers Change – teaming up seasoned volunteers with new High involvement of community services relevant in the training

7. Where are the gaps in services/program activities? How can the project be modified or expanded to meet still unmet needs?

1	Not sure at this time
2.	Some paperwork need to be streamlined or eliminated
4.	We don't know if we are reaching a wide cross section of housing types, location and age for both initiative for the last 6 months, should focus on this
5	I understand referrals from health professionals especially home care nurses are noticeably low. Enlist COO support for the program in IH – everything to down
6	Still have not reached some senior organizations or support networks that function in our city.
8	Support for participants in applying for \$ Calling workshop participants for HSC Poster in seniors location, with falls prevention suggestions Bring professionals on board with a "Vial for Life" program to keep track of medication needs and make sure it is updated Lots of media, consistent

8. What would be the most important considerations in setting this program up in another community?

1	Wellness and prevention in seniors. Enabling seniors independence and the ability to stay at home in their community longer. Decrease in overall health care costs
2	Getting the cooperation of seniors groups, the mayor and council and possibly the Veterans groups
3	Having a dedicated, as in paid, coordinator Funding (were we obviously have from Population health
4	Someone committed to coordinating volunteers (paid supporting unpaid) Proper training and support Identify communities with high rate of seniors around IH region.
5	Involvement of local people and local leaders. Small communities prefer to take charge of their own programs
6	Organization and support from community. The volunteer training
7	Coordinator needs to be organized and have good people skills
8	Developing of kit – 2 components – training and administration Develop questionnaire to identify other community goals and need to individualize for that community

9. Comments

1	I have been surprised by how many individuals have expressed how good the program was Contents were clear and understood Even though Yes/No questions were asked, they had many good comments about how much was learned. Also that they passed on the information to friends and family
2	I think it is a program that can stand alone in being successful. It is still my opinion that the people we helped should become more involved in promoting it for us.
3	One of the biggest challenges has been in collecting baseline data
5	I would like to see the FPP firmly located in Enderby at the CHC with ongoing referral from members of the Primary health Care team and other staff located there. Recognition of the important role volunteers can be make to the overall improvement in the health status of a defined population.
8	More media re. Preliminary results Offer free draws for all participants with significant desirable prizes