

**Final Audit Report** 

# Audit of Strategies for Recruitment and Retention in Scientific and Medical Disciplines

June 2008

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# **Executive Summary**

Scientific and medical personnel represent 46% of the department's tenured population. Health Canada depends on a strong foundation of science and research to fulfil its legislated mandate and contribute to the health and safety of Canadians.

The objective of the audit was to assess the effectiveness of human resources strategies relating to recruiting, staffing and retaining staff in the scientific and medical disciplines.

The audit was conducted by the Audit and Accountability Bureau in accordance with the Government of Canada's *Policy on Internal Audit*.

The Department, and Canada at large, has and will continue to face shortages in the medical and scientific groups. While acknowledging the considerable effort expended in developing strategies to deal with shortages in these fields, the audit demonstrated that the department needs to strengthen efforts in the areas of recruitment, staffing and retention by:

- ensuring that detailed branch and departmental strategic action plans are developed to respond to the human resources planning issues identified and ongoing barriers to recruitment and staffing;
- exploring cost effective alternatives to the existing legacy human resources information system to determine whether they could better respond to the strategic, tracking measurement, monitoring and reporting needs of the organization;
- promoting the preparation of targeted marketing strategies to ensure that there is an adequate flow of candidates for vacant positions;
- promoting an increased emphasis on indeterminate hiring and increasing the use of collective staffing and other inventories to fill vacancies;
- directing the improvement of exit interview information collection, analysis and subsequent action to help ensure the retention of key staff and corporate knowledge.

# Introduction

#### Background

Health Canada's mission is to help the people of Canada maintain and improve their health. This responsibility covers a wide range of functions, including: regulation of a large variety of products in order to protect health and safety; providing health services to First Nations and Inuit; working with provincial and territorial partners and stakeholders on important reform initiatives; promoting improved health; generating and sharing knowledge and information; and contributing to global health. As a science-based department, Health Canada depends on a strong foundation of science and research to fulfil its legislated mandate and contribute to the health and safety of Canadians. Like the rest of Canada, they are facing the challenges of a shortage of scientific and medical personnel that has persisted for decades. Scientific and medical personnel are critical resources to the successful completion of the Department's mission and mandate. They represent 46% of the Department's tenured staff (indeterminate and terms over 3 months, see Appendix A for a glossary of terminology used in this report).

Earlier audits have called attention to certain deficiencies that we again found in carrying out this audit. The 2004 AAB report on the Audit of the Efficiency and Effectiveness of the Staffing Process in Health Canada noted that the Department and branches have not yet developed and implemented a staffing strategy to support the achievement of the Department's mandate. Occupations with shortages of qualified candidates had been identified but only limited staffing plans had been developed and implemented to address the shortages. The 2004 report also highlighted the need for a more in-depth analysis of the present demographics, project retirement and growth factors to support the development of a staffing strategy including succession planning in Health Canada; and highlighted concerns about the significant use of short-term staffing.

### Objective

The objective of the audit was to assess the effectiveness of human resources strategies relating to recruiting, staffing and retaining staff in the scientific and medical disciplines.

#### Scope and Approach

The audit examined activities relating to human resources planning, recruitment and retention; and strategies related to key risk groups in the scientific and medical disciplines of Health Canada. The aspect of retention focused on issues within the Department's control. The audit focused on the actions taken by the Human Resources Services Directorate (HRSD) within Corporate Services Branch. Contacts also included the Office of the Chief Scientist, and selected personnel in PACRB, HECSB, HPFB and FNIHB.

The audit was conducted in and focused on corporate initiatives taken within the National Capital Region, although selected persons responsible for recruitment in regions were contacted. The audit period focused on actions that took place since the updated Public Service Employment Act took effect on December 31, 2005.

The audit was conducted in accordance with the Government of Canada's *Policy on Internal Audit*.

## **Findings, Recommendations and Management Responses**

The audit's findings are presented under two major headings: "Planning, recruitment and staffing" and "Retention of staff". These headings correspond to our two Lines of Enquiry.

## Planning, Recruitment and Staffing

In examining this area, we looked at the Department's human resources (HR) systems and procedures relating to planning for, and recruiting and staffing of scientific and medical staff. Our objective was to assess the adequacy of these systems. We would have expected to find that they were enabling the Department to meet its current and future needs for scientific and medical personnel in a timely and cost-effective manner. The audit found, however, weaknesses in these systems that were hindering the Department's efforts to do so.

During the departmental risk-based audit planning exercise, AAB noted that departmental managers expressed concern with the strategies and practices for ensuring that Health Canada has sufficient qualified people to achieve its short, medium and long term objectives. The departmental Summary of Human Resources Priorities for 2007-2008 noted significant needs for scientific and medical personnel.

**Human resources planning needs improvement.** Effective HR planning processes are central to managing the increasing turnover rates that the Department is facing. In 2006-2007, the rate at which employees left Health Canada increased to 18.4% from 13.5% three years earlier. The growth in the departure rate was largest for indeterminate staff, increasing from 500 leaving in 2004-2005, to 911 in 2006-2007. The greatest turnover occurred in the Nursing category. In 2006-2007, some 115 indeterminate nursing staff out of a population of 547 (21%) left the Department. Appendix B provides more detailed statistics on turnover rates for 2006-2007 and the gap between the total number of positions available and those currently filled.

Progress has occurred in developing the new human resources (HR) planning process, which is now in its second year of implementation. The process is well documented, and its objective is to integrate HR planning with operational planning. As part of the process, the Human Resources Services Directorate has developed departmental action plans to deal with recruitment and retention issues for scientific and medical personnel. These

plans acknowledge the need for the Department to commit to participating in university recruitment fairs, and to support cross-branch collective staffing. In addition, they identify possible leadership roles for each of the branches for particular occupational groups. Despite this progress, the HR planning process is deficient in certain key respects, as noted below.

**Lack of detailed plans.** We found that HR plans largely focus on *what* needs to be done to meet departmental needs for scientific and medical staff. However, they do not provide detailed steps—i.e., a roadmap—that show *how* the Department will actually meet these needs. For example, plans do not generally provide detailed branch and departmental action plans for dealing with particular recruitment, staffing and retention issues that have been identified. They also fail to specify either who is responsible for doing what, or the timelines for achieving measurable outputs or results. Although the Department is progressively building its HR plans, the gaps noted above in the existing HR plans, especially the lack of accountability for achieving results, will compromise Health Canada's ability to address any current or future shortfall in scientific and medical staff.

#### **Recommendation No. 1**

It is recommended that the Assistant Deputy Minister of the Corporate Services Branch ensure that detailed departmental strategic action plans are developed that respond to both the human resources planning issues identified, and ongoing barriers to recruitment and staffing.

#### Management Response

Management agrees with the recommendation and has committed to

- Develop and communicate an Integrated Departmental Business and HR Plan.
- Build a staffing/recruitment strategy to be presented to HR Council by end of May 2008 covering difficult to staff Science and Technology positions.
- Develop a recruitment framework based on a proactive, innovative and aggressive sourcing strategy.

**The HR information system.** A human resources information system (HRIS) facilitates the Department's efforts to develop specific HR plans and strategies at the branch or department-wide level. HRIS personnel are responsive to requests for information, and they have developed a variety of HRIS tools to support HR planning. However, the existing system's limitations make it difficult for them to provide additional support to human resources professionals and line managers and provide information to central agencies and to senior management for decision-making purposes.

We noted that the system does not facilitate measurement, analysis and monitoring of staffing actions and their relation to plans and service-related information in areas such as turn around times. The core staff who support the system thoroughly understand its capacity and limitations. Its limitations mean that considerable effort is required to respond to ad hoc requests for information that is not readily available from the HRIS, but which would facilitate the HR planning process.

#### **Recommendation No. 2**

It is recommended that the Assistant Deputy Minister of the Corporate Services Branch explore cost-effective alternatives to the existing Human Resources Information System that would better respond to the strategic, tracking, measurement, and monitoring and reporting needs of the organization.

#### Management response

Management agrees with the recommendation and has committed to:

• investigate the move to a new human resources management system, including the identification of options and the development of an implementation strategy.

## **Recruitment and Staffing**

As noted below, a number of factors pose barriers to recruiting candidates for positions and, subsequently, staffing (i.e., appointing them to) these positions.

#### Tapping the sources of candidates

Health Canada has been facing shortages of scientific and medical staff for some time. Problems associated with recruiting and retaining them are not unique to Health Canada and audits, task forces and studies over the past two decades have identified the shortages in Canada in the scientific and medical disciplines. Currently, the Department is pursuing various strategies to attract these staff including, but not limited to, outreach initiatives to universities and hiring students for summer and co-op sessions. However, it has no formal, targeted marketing strategy based on knowledge of the sources of the recruits and how to best access them. We note that the Department does not routinely review the effectiveness of its various outreach and student employment strategies to determine which are most effective in recruiting scientific and medical staff. Accordingly, management has no assurance that current recruiting practices will enable it to hire enough people with the skills needed for the Department to fulfil its mandate.

#### Short-term, temporary approaches to recruiting and staffing

The current approach to recruiting and staffing tends to focus on short-term strategies and lacks a strategic, department-wide orientation. The use of temporary, ad hoc staffing activities has been a continuing issue and was raised as a concern in our 2004 Internal Audit of the Effectiveness and Efficiency of the Staffing Process in the Department.

Our audit identified a number of issues relating to current recruitment and staffing practices that contribute to difficulties in recruiting and appointing scientific and medical personnel to positions in the Department.

Administrative burden associated with temporary staffing measures. While 78 % of all staffing transactions in 1999-2000 were for temporary staffing, there was a decrease to 63% in 2005-06. However, it is increasing again and in 2006-07 with 71% of the staffing actions in the Department as a whole have been for temporary staffing. Of the 10,336 staffing transactions in 2006-2007, 6,655 were for initial or extension/renewal of acting, casual or term appointments. This approach to filling vacancies results in an inefficient use of the resources of line managers and human resources personnel.

**The use of term vs. Indeterminate hiring.** In 2006-07 there were 1,912 indeterminate appointments through collective staffing pools, internal and external advertised and non-advertised appointment processes. Since the last internal audit, the Department has reduced the proportion of term employees. During 2006-2007 there were 1,245 initial and extension of term appointments down from 1,598 in 2003-04. There are a variety of reasons why managers may choose to use short term approaches to fill vacancies for temporary business needs including: the need to fill positions temporarily while employees are on assignment or leave, short term projects, and fluctuating workloads.

One key barrier to hiring indeterminate staff, according to managers and HR staff whom we interviewed, was that funding in some branch programs may not be sufficiently stable. This was also identified in our previous audit in 2004. This instability makes it difficult for managers to hire permanent staff to work on short-term projects because funding may disappear when the projects are finished.

The Department faces an increasingly tight labour market where there is significant competition for skilled people. We share the concerns that have been raised about temporary recruitment into the public service at large by the Public Service Commission, the Office of the Auditor General and most recently by the Clerk of the Privy Council. There is a need for more emphasis on hiring by departments to meet longer-term business needs through indeterminate hiring. **Delays in appointing candidates.** The statistics on the time taken to fill vacancies show that arrangements for the use of acting appointments, deployments and term employees can be completed much more quickly than an appointment to an indeterminate position. There are concerns that delays in the staffing process can adversely affect the Department's ability to attract candidates. Preliminary research by the Human Resources Services Directorate on the time it took to fill vacancies through a variety of approaches during 2005-2006 indicated that the average time to complete competitions and appoint staff ranged from 99 to 208 days. Delays of this length may prompt some candidates to accept another position while waiting to be appointed.

We acknowledge that some delays in the appointment process, such as security clearances and official language testing are largely outside the Department's control. However, it does have mechanisms to compensate for some of these delays. These include the use of conditional letters of offer to individuals once they have passed their security, language or medical clearances.

With respect to delays that are within its control, we note that the Department has not yet done the work necessary to determine what it can do to shorten them. Work in this area is, in our opinion, important, given that the branches have anticipated more than 3,000 classification actions for the Department as a whole for 2007-2008. Some 2,000 of those actions will be time-consuming, because they involve creating new positions, and reviewing and updating or reclassifying existing ones.

**Turnover of Human Resources Personnel.** A contributing factor to the problems identified above is the high turnover of the human resources professionals who advise managers on the appointment processes. During 2006-2007, out of 127 HR professionals, 79 (60.8%) left their positions in comparison with the departmental departure rate of 11.2%. Given the role that these staff play in facilitating and helping to guide the appointment process, in our view the high turnover rate will hinder management's efforts to deal with the issues discussed above. The high turnover in the HR community was not unique to Health Canada and seemed to have stabilized somewhat at the time of the audit. However, when key HR personnel who are involved in major staffing initiatives leave, it can significantly affect the success or failure of these initiatives.

#### The collective staffing approach

Collective staffing (CS) offers an approach that might contribute to dealing with some of the recruitment and staffing issues noted above. It is a strategic approach where managers agree on the requirements for one or more positions. They then work together to create pools of candidates for similar positions within the organization, rather than staffing one position at a time. The department has had some success with CS over the past years, most notably with nurses who conduct their own collective processes.

Implementing CS can pose challenges. It requires a change in culture—from filling vacancies one at a time, to thinking strategically. However, those involved in collective staffing in the department have identified a number of positive benefits associated with

moving away from short-term staffing approaches, and increasing the number and quality of candidates when more permanent positions are offered.

We found that management has not done the analysis needed to assess where CS has and has not worked in the Department. Accordingly, management does not know whether, or the extent to which, this potentially useful tool could be used to advantage in the Department.

#### **Recommendation No. 3**

It is recommended that the Assistant Deputy Minister of the Corporate Services Branch promote:

- *targeted marketing strategies;*
- the use of collective staffing; and
- an increased emphasis on indeterminate hiring where appropriate.

#### Management Response

Management agrees with the recommendation and has committed to:

- Develop a targeted marketing strategy for recruitment of scientific and medical disciplines
- Develop a recruitment framework based on a proactive, innovative and aggressive sourcing strategy
- Monitor and evaluate the outcomes of collective staffing initiatives, and promote the use of this strategy in occupational groups where it would be effective.

### **Retention of Personnel**

As part of this audit, we gathered information about the existence of retention-related programs. However, it was not the intent of this audit to review their effectiveness. Instead, we wanted to identify and comment on any issues or concerns that were raised in this area during the audit.

The Department on its own, and in conjunction with the Federal Science and Technology Community, has undertaken a number of initiatives to help retain staff in the scientific and medical groups. These include a biologist development program, where staff can move from a BI-1 to a BI-4 if they meet the necessary competencies; and a science management development program, which is an accelerated program designed to develop an experienced and qualified senior management cadre.

We found that some of these programs could be better utilized to maximize their potential impact on developing and retaining personnel. In the scientific field, Health Canada developed the Scientist Emeritus program in 2002. Its purpose is to bring back retired scientists in a voluntary capacity to transfer knowledge, and mentor and coach young

scientists in their field of expertise. The first Scientist Emeritus was named in 2005. Over the course of the audit the number increased to three. Consideration should be given to broadening its use in more Branches and with more of the scientific occupational classifications.

One approach to retaining personnel is to collect and analyze information from exit interviews on why people leave their jobs. It is especially important to retain professional staff, given that it is expensive to recruit and train them. In the past the Department carried out exit interviews to gather information on why personnel left and what could be done to improve the retention of critical resources. The exit interview process was not effective, and only 115 questionnaires were completed, representing only 13.6% of the actual departures.

During the audit the Department began to change its exit interview process for employees who had changed jobs in the Department or were leaving. It is now a web-based questionnaire with an anonymous response option which would provide information that could be analysed and reported annually. Employees also have the option of an exit interview with their manager, human resources advisor or a corporate planning officer. The collection and analysis of such information could be invaluable for human resources planning, recruitment and retention purposes.

#### **Recommendation No. 4**

It is recommended that the Assistant Deputy Minister of the Corporate Services Branch continue to improve and promote:

- the use of exit interviews by management and employees; and
- the collection and analysis of exit interview information.

#### Management Response

Management agrees with the recommendation and has committed to:

- Review the effectiveness of the exit interview program and make recommendations on required changes.
- Implement strategic measures of employee engagement and satisfaction as leading indicators of retention.

# Recruitment and Retention of Nurses: A More Integrated Approach

The audit also looked at the approach to recruitment of nurses which is done by the Office of Nursing Services (ONS) at headquarters and through regional offices. ONS develops standards, policies, guidelines and leads national initiatives. Regional offices ensure service, support and management such as recruiting and orienting nurses. During the fiscal year 06-07 there were 76 individuals recruited. Their recruitment efforts focus on nurses and they have taken a more integrated approach to recruitment and retention.

#### **Description of situation and challenges**

The majority of Health Canada nurses provide primary health care in First Nations communities in rural, remote or isolated communities. The Department operates and/or funds facilities for primary health care in about 200 remote communities. Health Canada is facing a demographic challenge with regard to its nursing population. Only 8% of its nurses are under 30 years of age and 40% are over age 50. The current Health Canada nursing workforce is older than the overall Registered Nurse population of Canada. In a 2006 survey 23% of its nurses noted their intention to retire within the next 5 years and was an increase from 20% in 2002.

The turnover of nurses in northern communities is high. As a result there is an ongoing requirement for temporary or relief staffing in order to maintain services in the communities and prevent the loss of current nursing staff. The nursing shortages are ongoing and vacancy rates by region vary from 31% to 66%. The costs associated with recruiting and training a new nurse is significant and was estimated by the Department to be \$108,000 per new nurse. Nurses are part of the departmental shortage group which will permit the use of non-advertised appointments by delegated cost-centre managers. Health Canada is not the only organization facing a shortage of nurses and faces competition from other organizations hiring nurses in Canada and abroad. However, in facing this competition they have taken a number of approaches to respond to the challenges.

#### Actions taken to recruit and retain nurses

Recruitment and retention of nurses at ONS has benefited from having long-term resources dedicated to recruiting and retaining nurses. Nursing positions are filled by a combination of indeterminate full time employees, term employees and part-time resources, including contracted staff from agencies. The ONS recruits nurses into the Nurse Recruitment Inventory System. The Regions are responsible for hiring the nurses and making efforts to retain them. The ONS has developed a nursing recruitment, retention and marketing strategy. It is built on previous strategies and is based on an analysis of the Office's strengths, weaknesses, opportunities and threats. Key strategies include—but are not limited to—advertising positions widely; providing support such as relief nurses, peer counselling and programs to reduce stress; and offering various financial incentives through collective bargaining.

Despite these efforts, however, shortages persist. According to interviews with the ONS, one key reason for these shortages is that salaries are not high enough to attract and retain experienced nurses—particularly nurse practitioners. Nurses' salaries are largely determined outside of the Department, and they depend on the collective bargaining process and the classification of positions. The ONS is working with Treasury Board to deal with the classification and compensation of nurses in isolated communities and the Department has already gained approval to use recruitment and retention bonuses for nurses.

National and regional recruitment initiatives have included advertising jobs in weekly newspapers coast to coast, and attendance at nursing and general career fairs. There are details on careers in nursing on the Health Canada website. The department also supported the Canadian Nurses Portal which is a website that provides nurses with access to health care information and supports the development of their careers. There are national and regional recruitment initiatives. The Nursing Recruitment Inventory System (NRIS) which maintains a list of prospective candidates for jobs is being upgraded. Educational initiatives included funding for primary skills education and financial support to complete the mandatory community health nursing course. Limited funding is also provided for nurses to complete their degrees.

Actions are being taken by the department to assist in the retention of nurses, including identifying and dealing with health and safety concerns. In addition, the department is conducting research and dealing with the various central agencies and other parties on collective bargaining and other issues related to terms and conditions of work. In order to provide support to nurses in the field, clinical practice guidelines have been created and a critical incident stress management program developed to provide counselling and peer support to nurses. A *second nurse on standby* policy has been implemented to ensure backup to the primary nurse who is assigned to standby and call back duties after regular hours and on weekends.

The Nurse Resource Team Strategy was approved in 2002 and implemented in three regions to ensure nursing stations remain fully staffed and provide additional nursing support during emergency disease outbreaks, community disasters or mass immunization campaigns. Teams of nurses are hired who will normally work a minimum of 50% of a full time position; taking assignments wherever there are vacancies in a region. It was not to be used for long term assignments in place of more appropriate staffing processes. The resource team strategy was designed to allow the department to maintain services in the communities and deal with short term vacancies, provide relief to the other nurses working and reduce overtime. In addition, the regions make use of nurses hired from various agencies in order to fill short term vacancies.

These short term strategies have some negative implications over the longer term with regards to costs, recruitment and service related issues. The use of agency and resource team nurses reduces the continuity of care that a community receives when the same nurse is working there all the time. In addition the remuneration and benefits for resource

pool workers, agency employees and indeterminate employees vary and can have an impact on recruitment and retention. Agency and resource pool workers do not work full time and this is attractive to those who are looking for a different work-life balance. They also are paid for their travel to and from the communities they work in while indeterminate employees are provided with less frequent trips in and out of northern communities. The resource team approach has also been used to recruit part time nurses. The use of agency and nursing teams are more costly options than indeterminate staffing. Costs associated with the use of agency nurses were reported to be in excess of \$12 Million for the period of 2006-2007. However, in order to maintain services in the communities, it was felt by the department that the nursing resource teams should be continued and it is less expensive than the use of agency personnel. Resource teams are needed, but they do not completely solve the high vacancy rates.

## Appendix A: Glossary of Terms Utilized

Asset qualifications: qualifications that are not essential to perform the work, but which would, now or in the future, benefit the organization or be an enhancement in terms of the work to be performed

**Casual employment:** a short-term employment option to hire persons to the public service for a period not exceeding 90 working days in one department in any year. These persons may not participate in any advertised internal appointment process.

**Conditional offer of appointment:** an offer of appointment conditional upon the applicant's satisfying one or more conditions, before the appointment is made. Examples of conditions include, but are not limited to, security or reliability screening, and taking the oath or solemn affirmation.

**Employment tenure (Indeterminate or specified period/term):** the period of time for which a person is employed; may be indeterminate (full or part-time, including seasonal employment), specified-period (full or part-time) or casual

**Essential qualifications:** those necessary for the work to be performed; they must be met in order for a person to be appointed. The other merit criteria are asset qualifications, operational requirements or organizational needs established by the deputy/agency head.

**Federal Student Work Experience Program (FSWEP):** a program through which federal organizations recruit students; gives full-time secondary school, CEGEP, college, technical institute and university students opportunities to learn about the federal government and gain valuable experience while developing and improving their employability skills.

**Merit criteria:** essential qualifications as well as other merit criteria. Essential qualifications are those necessary for the work to be performed; they must be met in order for a person to be appointed. The other merit criteria are asset qualifications, operational requirements or organizational needs established by the deputy head. The manager decides whether the chosen person needs to meet the other criteria.

Recruitment: hiring from outside the public service

**Staffing:** promotions, lateral or downward deployments, secondments, assignments and acting appointments within the public service

**Student bridging:** a mechanism that allows managers to hire qualified recent postsecondary graduates who have previously worked in the public service through either the Federal Student Work Experience Program, the Co-operative Education and Internship Program, or the Research Affiliate Program, and have completed their program of study within the last 24 months.

# Appendix B: Scientific and Medical Group Vacancies and Anticipated Staffing

| Occupational Group<br>(Scientific and Medical)     | Indeterminate<br>and Term<br>Employees<br>(> 3 months)<br>as of October<br>1, 2007 | Positions<br>Vacated<br>2006-<br>2007 | Rate<br>Positions<br>Vacated | Anticipated<br>Staffing<br>Activities |
|--|--|---------------------------------------|------------------------------|---------------------------------------|
| BI - Biology                                       | 895  | 139                                   | 15.5%                        | 281                                   |
| CH - Chemistry                                     | 295  | 50                                    | 16.9%                        | 115                                   |
| DE - Dentistry                                     | 15   | 2                                     | 13.3%                        |                                       |
| EG – Engineering and Scientific Support            | 564  | 73                                    | 12.9%                        | 169                                   |
| EN - Engineering                                   | 10   | 0                                     | 0%                           |                                       |
| ES – Economists, Social<br>Sciences and Statistics | 872  | 213                                   | 24.4%                        | 463                                   |
| MA – Research - Mathematics                        | 1  | 1                                     | 100%                         |                                       |
| MD - Medicine                                      | 130  | 10                                    | 7.7%                         | 56                                    |
| ND – Nutrition and Dietetics                       | 50   | 4                                     | 8.0%                         |                                       |
| NU - Nursing                                       | 750  | 175                                   | 23.3%                        | 204                                   |
| OP – Occupational and Physical<br>Therapy          | 5  | 0                                     | 0%                           |                                       |
| PC – Physical Sciences                             | 115  | 16                                    | 13.9%                        | 88                                    |
| PH - Pharmacy                                      | 10   | 1                                     | 10%                          |                                       |
| PS - Psychology                                    | 3  | 0                                     | 0%                           |                                       |
| SE – Scientific Research                           | 123  | 12                                    | 9.8%                         | 38                                    |
| SG – Scientific Regulation                         | 582  | 71                                    | 12.2%                        | 208                                   |
| SW – Social Work                                   | 1  | 0                                     | 0%                           |                                       |
| VM – Veterinary Medicine                           | 20   | 3                                     | 15.0%                        | 11                                    |

Source: Health Canada Shortage Group List