



**DATA ON R&D PERFORMED (questions 2 to 6)**

**2. Expenditures for R&D performed within this organization in Canada**

**Expenditures for fiscal year ending in 2011**

| Major fields of R&D                         | Current            | Capital            | Total              |
|---------------------------------------------|--------------------|--------------------|--------------------|
|                                             | CAN\$ thousands    |                    |                    |
| Natural sciences and engineering sub-total: | C2030<br>\$ 000.00 | C2035<br>\$ 000.00 | C2040<br>\$ 000.00 |
| Medical                                     | C2031<br>\$ 000.00 | C2036<br>\$ 000.00 | C2041<br>\$ 000.00 |
| Other                                       | C2032<br>\$ 000.00 | C2037<br>\$ 000.00 | C2042<br>\$ 000.00 |
| Social sciences and humanities sub-total    | C2033<br>\$ 000.00 | C2038<br>\$ 000.00 | C2043<br>\$ 000.00 |
| <b>Total</b>                                | C2034<br>\$ 000.00 | C2039<br>\$ 000.00 | C2044<br>\$ 000.00 |

**Planned expenditures for fiscal year ending in 2012**

| Major fields of R&D                         | Current            | Capital            | Total              |
|---------------------------------------------|--------------------|--------------------|--------------------|
|                                             | CAN\$ thousands    |                    |                    |
| Natural sciences and engineering sub-total: | C2045<br>\$ 000.00 | C2050<br>\$ 000.00 | C2055<br>\$ 000.00 |
| Medical                                     | C2046<br>\$ 000.00 | C2051<br>\$ 000.00 | C2056<br>\$ 000.00 |
| Other                                       | C2047<br>\$ 000.00 | C2052<br>\$ 000.00 | C2057<br>\$ 000.00 |
| Social sciences and humanities sub-total    | C2048<br>\$ 000.00 | C2053<br>\$ 000.00 | C2058<br>\$ 000.00 |
| <b>Total</b>                                | C2049<br>\$ 000.00 | C2054<br>\$ 000.00 | C2059<br>\$ 000.00 |

**Forecast expenditures for fiscal year ending in 2013**

| Major fields of R&D                         | Current            | Capital            | Total              |
|---------------------------------------------|--------------------|--------------------|--------------------|
|                                             | CAN\$ thousands    |                    |                    |
| Natural sciences and engineering sub-total: | C2060<br>\$ 000.00 | C2065<br>\$ 000.00 | C2070<br>\$ 000.00 |
| Medical                                     | C2061<br>\$ 000.00 | C2066<br>\$ 000.00 | C2071<br>\$ 000.00 |
| Other                                       | C2062<br>\$ 000.00 | C2067<br>\$ 000.00 | C2072<br>\$ 000.00 |
| Social sciences and humanities sub-total    | C2063<br>\$ 000.00 | C2068<br>\$ 000.00 | C2073<br>\$ 000.00 |
| <b>Total</b>                                | C2064<br>\$ 000.00 | C2069<br>\$ 000.00 | C2074<br>\$ 000.00 |

**3. Sources of funds for R&D performed within this organization for the fiscal year ending in 2011**

CAN\$ thousands

|                                                                                                               |       |    |  |  |  |  |  |   |   |   |     |
|---------------------------------------------------------------------------------------------------------------|-------|----|--|--|--|--|--|---|---|---|-----|
| a) Reporting organization (e.g. interest on own funds, investments income, membership dues, trust funds)..... | C3160 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| b) Federal government .....                                                                                   | C3161 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| c) Provincial governments (sub-total) .....                                                                   | C3162 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 1. Newfoundland and Labrador .....                                                                            | C3163 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 2. Prince Edward Island .....                                                                                 | C3164 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 3. Nova Scotia .....                                                                                          | C3165 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 4. New Brunswick .....                                                                                        | C3166 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 5. Quebec .....                                                                                               | C3167 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 6. Ontario .....                                                                                              | C3168 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 7. Manitoba .....                                                                                             | C3169 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 8. Saskatchewan .....                                                                                         | C3170 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 9. Alberta .....                                                                                              | C3171 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 10. British Columbia .....                                                                                    | C3172 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 11. Yukon .....                                                                                               | C3173 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 12. Northwest Territories .....                                                                               | C3174 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 13. Nunavut .....                                                                                             | C3175 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| d) Canadian business enterprises .....                                                                        | C3176 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| e) Other Canadian private non-profit organizations .....                                                      | C3177 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| f) Other Canadian sources (e.g. universities)<br>(Please print full name)                                     |       |    |  |  |  |  |  |   |   |   |     |
| 1. <input type="text"/>                                                                                       | C3578 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 2. <input type="text"/>                                                                                       | C3579 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| 3. <input type="text"/>                                                                                       | C3580 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| g) Foreign sources .....                                                                                      | C3181 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |
| <b>Total</b> (equal to the 2011 grand total expenditures of question 2 (cell C2044)).....                     | C3182 | \$ |  |  |  |  |  | 0 | 0 | 0 | .00 |

**4. Personnel of this reporting unit engaged in R&D for the fiscal year ending in 2011 (full time equivalent – FTE)**  
(use rounded numbers only)

Full time equivalent

**Scientists and engineers**

C4112

**Technicians and technologists:** technically trained personnel who assist scientists and engineers in R&D; (e.g. chemical technicians, draftspersons). They may be certified by either provincial educational authorities or by provincial or national scientific or engineering associations.

C4113

**Other:** personnel directly engaged in the R&D program (e.g. machinists and electricians engaged in construction of prototypes or staff engaged in the administration or clerical support of R&D units)

C4114

**Total R&D personnel**

C4115

**5. Fields of medical R&D performed within this organization for the fiscal year ending in 2011**

Please indicate the medical field in which R&D is performed within this organization.

|                          |       | Yes                     | No                      |                                                                                      | Yes   | No                                              |
|--------------------------|-------|-------------------------|-------------------------|--------------------------------------------------------------------------------------|-------|-------------------------------------------------|
| Cellular biology         | C5067 | 1 <input type="radio"/> | 3 <input type="radio"/> | Drugs and their effects                                                              | C5074 | 1 <input type="radio"/> 3 <input type="radio"/> |
| Genetics                 | C5068 | 1 <input type="radio"/> | 3 <input type="radio"/> | Visual sciences<br>(e.g. ophthalmology, optometry<br>and other eye related research) | C5075 | 1 <input type="radio"/> 3 <input type="radio"/> |
| Immunology               | C5069 | 1 <input type="radio"/> | 3 <input type="radio"/> | Other medical fields<br>(please specify)                                             |       |                                                 |
| Endocrinology            | C5070 | 1 <input type="radio"/> | 3 <input type="radio"/> | a) C5176 <input type="text"/>                                                        | C5076 | 1 <input type="radio"/> 3 <input type="radio"/> |
| Nutrition and metabolism | C5071 | 1 <input type="radio"/> | 3 <input type="radio"/> | b) C5177 <input type="text"/>                                                        | C5077 | 1 <input type="radio"/> 3 <input type="radio"/> |
| Cancer                   | C5072 | 1 <input type="radio"/> | 3 <input type="radio"/> | c) C5178 <input type="text"/>                                                        | C5078 | 1 <input type="radio"/> 3 <input type="radio"/> |
| Haematology              | C5073 | 1 <input type="radio"/> | 3 <input type="radio"/> |                                                                                      |       |                                                 |

**6. R&D expenditures by socio-economic objectives within this organization for the fiscal year ending in 2011**

|                                                                                         |       | CAN\$ thousands |                      |                      |                      |                      |                      |        |
|-----------------------------------------------------------------------------------------|-------|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|--------|
| 1. Exploration and exploitation of the Earth                                            | C6117 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 2. Infrastructure and general planning of land use                                      | C6118 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 3. Control and care of the environment                                                  | C6119 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 4. Protection and improvement of human health                                           | C6120 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 5. Production, distribution and rational utilization of energy                          | C6121 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 6. Agricultural production and technology<br>(e.g. agriculture, fishing, forestry)      | C6122 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 7. Industrial production and technology                                                 | C6123 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 8. Social structures and relationships                                                  | C6124 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 9. Exploration and exploitation of space                                                | C6125 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 10. Non-oriented research                                                               | C6126 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 11. Other civil research                                                                | C6127 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| 12. Defence                                                                             | C6128 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |
| <b>Total</b><br>(equal to the 2011 grand total expenditures of question 2 (cell C2044)) | C6129 | \$              | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | 000.00 |

**DATA ON PAYMENTS FOR R&D**

**7. Payments for R&D performed by other organizations for the fiscal year ending in 2011**

| Sector of performance                           | Major fields of R&D                      |                                            | Subcomponents of natural sciences and engineering: |              | Total        |
|-------------------------------------------------|------------------------------------------|--------------------------------------------|----------------------------------------------------|--------------|--------------|
|                                                 | Social sciences and humanities Sub-total | Natural sciences and engineering Sub-total | Medical                                            | Other        |              |
|                                                 | CAN\$ thousands                          |                                            |                                                    |              |              |
| Federal Government                              | C7200<br>000                             | C7207<br>000                               | C7214<br>000                                       | C7221<br>000 | C7228<br>000 |
| Provincial Government                           | C7201<br>000                             | C7208<br>000                               | C7215<br>000                                       | C7222<br>000 | C7229<br>000 |
| Canadian business enterprises                   | C7202<br>000                             | C7209<br>000                               | C7216<br>000                                       | C7223<br>000 | C7230<br>000 |
| Other Canadian private non-profit organizations | C7203<br>000                             | C7210<br>000                               | C7217<br>000                                       | C7224<br>000 | C7231<br>000 |
| Other Canadian sources (e.g. universities)      | C7204<br>000                             | C7211<br>000                               | C7218<br>000                                       | C7225<br>000 | C7232<br>000 |
| Foreign                                         | C7205<br>000                             | C7212<br>000                               | C7219<br>000                                       | C7226<br>000 | C7233<br>000 |
| <b>Total</b>                                    | C7206<br>000                             | C7213<br>000                               | C7220<br>000                                       | C7227<br>000 | C7234<br>000 |

**SURVEY COMPLETION TIME**

**8. Please indicate how long it took you to complete this questionnaire.**

C8909   minutes

**CERTIFICATION**

|                                                                        |                    |                                                                       |                                  |
|------------------------------------------------------------------------|--------------------|-----------------------------------------------------------------------|----------------------------------|
| First name of person who completed this report (please print)<br>C0054 |                    | Last name of person who completed this report (please print)<br>C0013 |                                  |
| Official position<br>C0014                                             |                    |                                                                       |                                  |
| Business address<br>C1004                                              |                    |                                                                       | Postal Code<br>C1007             |
| Telephone No.<br>C0017                                                 | Extension<br>C0027 | Fax No.<br>C0016                                                      | GST No. (BN No.)<br>C1020        |
| E-mail address<br>C0018                                                |                    |                                                                       | Date<br>C0015<br>Y Y Y Y M M D D |

Please describe briefly your organization's main activities.  
If you have enclosed an annual report which contains this information, disregard this question.  
C0055

## COMMENTS

### Reporting differences

Statistics Canada compares current responses with those provided for the last reporting period. Please describe reasons for any variation with previous information (e.g., expansion, businesses acquired or sold, closures, organizational changes etc).  
Explaining possible changes or events may prevent follow-up by Statistics Canada.

C9920

FOR INFORMATION ONLY

**Thank you for completing this questionnaire.  
Please retain a copy for your records.**

FOR INFORMATION ONLY

# INSTRUCTION GUIDE

Need assistance?

Call us at 1-877-604-7828

FOR INFORMATION ONLY



## INSTRUCTION GUIDE

Please answer all questions. Since the required information cannot normally be readily extracted from available records, your best estimates will be quite satisfactory. The last survey was carried out for the fiscal year ending in 2010. You may have a file copy of your return which will help you now.

Additional forms and explanations of the terms used in the questions can be obtained from Statistics Canada: call **1-877-604-7828**.

**Please return the completed questionnaire within 30 days of receipt.**

If you are unable to do so, please inform us of the expected completion date. If you receive more than one copy of this survey questionnaire for the same private non-profit organization, please complete only one and return with duplicate(s). If you require assistance in the completion of this questionnaire or have any questions regarding the survey please address all enquiries to:

**Statistics Canada**  
**Ottawa, Ontario**  
**K1A 0T6**  
**Tel: 1-877-604-7828**  
**Fax: 1-888-883-7999**  
**Email: [bsso@statcan.gc.ca](mailto:bsso@statcan.gc.ca)**

### Definitions

“Research and experimental development (R&D) comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.”

**OECD (2002), Frascati Manual**

**Research and development (R&D)** is creative work in the natural sciences and engineering, and social sciences and humanities fields undertaken on a systematic basis to increase the stock of knowledge or discover new applications for existing knowledge. New knowledge involves the integration of newly acquired information into existing hypotheses, the formulation and testing of new hypotheses or the re-evaluation of existing observations.

**NOTE: Exclude all non-R&D activities (such as investigative studies, medical care, social services, education and training, dissemination of information, etc.), which your organization undertakes or funds.**

To illustrate the distinction between R&D and investigative studies: the developing and testing of new methods for treating a neurosis is research. A study of psychiatric services in a region to suggest changes is an investigative study.

### Major fields of R&D

- a) Natural sciences and engineering:
  - Medical sciences include medicine, dentistry, pharmacy, etc.

- Other sciences include all disciplines in the natural sciences except the medical sciences (e.g. *mathematics, physics, chemistry, biology and engineering*).

- b) Social sciences and humanities include all disciplines involving the study of human actions and conditions, and the social, economic and institutional mechanisms affecting humans (e.g. *economics, history, sociology*).

### Expenditure types

**Current expenditures** are expenditures on items used up within a relatively short time period or costing relatively little. They include wages, salaries and related costs; materials and supplies used; necessary background literature; minor scientific equipment and associated administrative overhead costs.

**Capital expenditures** are expenditures on facilities such as buildings, equipment, machinery and land.

**Exclude capital depreciation.**

### Questions 1 and 4 – Full Time Equivalent (FTE)

R&D may be carried out by persons who work solely on R&D projects or by persons who devote only part of their time to R&D, and the balance to other activities such as testing, quality control and production engineering. To arrive at the total effort devoted to R&D in terms of personnel, it is necessary to estimate the full time equivalent of these persons working only part time in R&D.

FTE (Full Time Equivalent) = Number of persons who work solely on R&D projects + the estimate of time of persons working only part of their time on R&D.

*Example calculation:* If out of five scientists engaged in R&D work, one works solely on R&D projects and the remaining four devote only one quarter of their working time to R&D, then:  $FTE = 1 + 1/4 + 1/4 + 1/4 + 1/4 = 2$  scientists.

### Question 6 – Research and development (R&D) expenditures by socio-economic objectives

Socio-economic objectives allow organizations to classify their R&D resource allocations according to the purpose for which the expenditure is intended. The objectives are listed on the questionnaire at the highest level of aggregation with sub-levels given here for clarification of categories. In many cases, projects have multiple objectives and an organization should assign its expenditures consistent with the stated objectives. Care must be taken to avoid “double counting”.

The objectives are based on the Nomenclature for the Analysis and Comparison of Scientific Programs and Budgets (NABS) produced by the Statistical Office of the European Communities (Eurostat).

#### 1. Exploration and exploitation of the Earth

R&D activities with objectives related to the exploration of the Earth's crust and mantle, seas, oceans and atmosphere. It also includes climatic and meteorological research, polar exploration (under various headings, as appropriate) and hydrology.

**Excludes:** R&D activities on pollution (objective 3), soil improvement or land-use (objective 2), and fishing (objective 6).

## **2. Infrastructure and general planning of land use**

R&D activities related to infrastructure and land development, including research on the construction of buildings.

This socio-economic objective covers research on infrastructure and land development, including research on the construction of buildings. More generally, this socio-economic objective covers all research relating to the general planning of land use. This includes research into protection against harmful effects in town and country planning but not research into other types of pollution.

## **3. Control and care of the environment**

R&D activities related to the control of pollution, aimed at the identification and analysis of the sources of pollution and their causes, and all pollutants, including their dispersal in the environment and the effects on man, species (fauna, flora, microorganisms) and biosphere. Development of monitoring facilities for the measurement of all kinds of pollution is included. The same is valid for the elimination and prevention of all forms of pollution in all types of environment.

## **4. Protection and improvement of human health**

R&D activities related to protecting, promoting and restoring human health broadly interpreted to include health aspects of nutrition and food hygiene. It ranges from preventative medicine, including all aspects of medical and surgical treatment, both for individuals and groups, and the provision of hospital and home care, to social medicine and pediatric and geriatric research.

## **5. Production, distribution and rational utilization of energy**

R&D activities related to the production, storage, transportation, distribution and rational use of all forms of energy. It also includes R&D activities on processes designed to increase the efficiency of energy production and distribution, and the study of energy conservation.

## **6. Agricultural production and technology**

R&D activities related to the promotion of agriculture, forestry, fisheries and foodstuff production. It includes: R&D activities on chemical fertilizers, biocides, biological pest control and the mechanization of agriculture; research on the impact of R&D activities in the field of developing food productivity and technology.

## **7. Industrial production and technology**

R&D activities related to industrial production and technology. It includes R&D activities on industrial products and their manufacturing processes except where they form an integral part of the pursuit of other objectives (e.g. defence, space, energy, agriculture).

## **8. Social structures and relationships**

R&D activities related to social objectives, as analyzed in particular by social and human sciences, which have no obvious connection with other objectives. This analysis includes quantitative, qualitative, organizational and forecasting aspects of social problems.

## **9. Exploration and exploitation of space**

R&D activities in the defence field is classified in objective 12. (Although civil space research is not, in general, concerned with particular objectives, it frequently has a specific goal, such as the increase of general knowledge (e.g. astronomy), or relates to particular applications (e.g. telecommunication satellites)).

## **10. Non-oriented research**

R&D activities motivated by scientific curiosity with the objective of increasing scientific knowledge. It also includes funding used to support postgraduate studies and fellowships.

## **11. Other civil research**

R&D activities which cannot (yet) be classified to a particular objective.

## **12. Defence**

R&D activities for military purposes. It also includes basic research and nuclear and space research financed by ministries of defence. Civil R&D activities financed by ministries of defence, for example, in the fields of meteorology, telecommunications and health, should be classified in the relevant objectives.

## General information

### Confidentiality

#### Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the *Statistics Act*.

Statistics Canada will use the information from this survey for statistical purposes.

### Data-sharing agreements

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which have agreed to keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

**Section 11** of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there is a **Section 11** agreements with the Institut de la statistique du Quebec.

The shared data will be limited to information pertaining to business establishments located within the jurisdiction of Quebec.

### Record linkages

To enhance the data from this survey, Statistics Canada may combine it with information from other surveys or from administrative sources.

FOR INFORMATION

**Thank you for completing  
this questionnaire.**

**Please retain a copy for  
your records.**

Need assistance? Call us at 1-877-604-7828.

Please mail the completed questionnaire in the enclosed envelope  
or fax it to Statistics Canada at **1-888-883-7999**.

Lost the return envelope or need help?

See instruction guide on page 9, call us at **1-877-604-7828** or mail to:  
Statistics Canada,  
150 Tunney's Pasture Driveway,  
Distribution Center SC-0702,  
Ottawa, Ontario K1A 0T6