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EXECUTIVE SUMMARY

The Rapid Risk Factor Surveillance System (RRFSS) is an ongoing telephone survey used to gather surveillance data, monitor public opinion on key public health issues, and collect information on emerging issues of importance to public health. The purpose of RRFSS is to provide timely data relevant to public health needs in participating Ontario public health units.

In 2007, RRFSS received funding from the Public Health Agency of Canada to evaluate the existing RRFSS website, identify effective website enhancements, implement selected enhancements within the project timeframe and make recommendations for future enhancements.

The Evaluation Advisory Group developed the following goals for the project:
1. to define the RRFSS website’s purpose and target users,
2. to evaluate the usability of the RRFSS website and recommend improvements to better meet target users’ needs,
3. to enhance the RRFSS website and evaluate the effectiveness of improvements, and
4. to provide the foundation for ongoing improvement of the RRFSS website.

This report addresses the following objectives developed from project goals:
- to identify users of the current website and describe how it is used,
- to prepare a Statement of Purpose and identify website target users,
- to identify barriers to using the current website,
- to gather suggestions for website improvements from RRFSS members and other website users,
- to recommend short- and long-term improvements to the website,
- to implement short-term improvements to the non-prevalence-data sections of the website,
- to evaluate the enhanced website, and
- to outline a plan for ongoing website maintenance and improvement.

Website Best Practices

The RRFSS website was reviewed in light of website best practices, with a focus on website usability. Usability principles emphasize the importance of learning about website users and applying what is learned to improve their website user experience. There are many proven techniques for learning about website users and how they use websites, including user interviews, online surveys, card sorting exercises and usability task analyses. There are several ways in which websites can be designed to allow users to complete tasks easily and efficiently, including creating a clear visual hierarchy on each page, using website conventions, making clickability obvious, simplifying content presentation, greeting users with a link-rich home page, letting users know where they are and
where they've been, ordering content in ways that make sense to users, and providing users with multiple ways to access desired information.

**Website Evaluation**

Four methods were used to evaluate the RRFSS website: a telephone interview of RRFSS members, an online survey, usability testing, and a card sorting exercise. Result highlights include the following:

- The RRFSS website is primarily used by RRFSS members, health unit staff, and by students and academic researchers. Other groups, including government staff, staff of nonprofit organizations, and members of the general public, use it only infrequently.
- RRFSS members seeking specific information on the website face significant hurdles, especially those who are less familiar with the website. Website visitors who are not RRFSS members and who are looking for general information can find most information with relative ease.
- In general, users expressed positive opinions of the website’s appearance.
- RRFSS members expressed some concern with the timeliness of information posted on the website, and provided suggestions for the posting of additional material on the website to better meet their needs.
- Evaluation provided useful information on how to organize material on the website to be more logical and easily accessible to users.

**Website Improvements**

Based upon evaluation results and research on website best practices, recommendations were made to improve the RRFSS website. Short-term improvements--those judged feasible given the project budget and timelines--were implemented and feedback on these changes received from RRFSS regional groups. The following short-term improvements were implemented:

- The navigation structure was revised to improve usability.
- A link-rich home page and “accordion-style” navigation bar were introduced.
- Users were provided clearer feedback on their location within the website.
- A site map and search function were introduced, accessible from every page.
- Links were given a distinct “clickable” look.
- Users were given the option to adjust font size.
- Content was updated, and useful additional content added.

Following implementation of these short-term improvements, feedback was collected from RRFSS regional groups. Feedback was generally positive, with specific positive comments about the font size change option, the site map and the overall “look” and layout of the website.
Website Recommendations

Policies and Procedures

The following recommendations are made regarding policies and procedures:

- A Statement of Purpose should be adopted to serve as a guide in future development of the website.
- As the RRFSS website evolves, adoption of website security and privacy policies should be considered. They should be developed in consultation with RRFSS participants, ISR, and website funders, if applicable. Details will depend on the nature of future changes to the RRFSS website.
- RRFSS should also consider policies on acceptable use, accessibility, copyright, external links and/or disclaimers, and procedures for making changes to the website.
- This project contracted the services of a consultant to develop the prevalence data query system. The experience pointed out the need for data sharing policies and procedures with regard to contractors who are required to work with the RRFSS dataset.

Maintenance

Website maintenance recommendations are made to enhance website timeliness, standardize document format, respond promptly to feedback, and fix “linkrot” and “bugs.”

The increased maintenance requirements associated with the enhanced website might be provided by a webmaster hired specifically for RRFSS or through a contract.

Long-term Improvement

Long-term improvement recommendations are made to achieve the following:

- make the website a central source of information for RRFSS members,
- make the website more useful to a wider range of users,
- improve usability,
- enhance timeliness,
- enhance RRFSS credibility, and
- enhance website security.
Ongoing Improvement Practices

The following practices are recommended to ensure ongoing improvement of the RRFSS website:

- Include the website in RRFSS planning.
- Seek new sources of funding to implement the recommendations contained in this report.
- Provide continuing education and training for webmaster.
- Collect and analyze user feedback.
- Update the website to reflect changes in technology, website design and usability best practices.
- Regularly review the web hosting and support services contract.
1. BACKGROUND

1.1 About RRFSS

The Rapid Risk Factor Surveillance System (RRFSS) is an ongoing telephone survey used to gather surveillance data, monitor public opinion on key public health issues, and collect information on emerging issues of importance to public health. The purpose of RRFSS is to provide timely data relevant to local public health needs. Results are used to support program planning and evaluation, advocate for public policy development, and improve community awareness regarding the risks for chronic diseases, infectious disease and injuries.

RRFSS uses computer assisted telephone interviewing (CATI) technology, with sampling based on random digit dialing. Interviews are conducted by the Institute for Social Research (ISR) at York University on behalf of all RRFSS-participating health units. Each month, a random sample of 100 adults aged 18 years and older is interviewed regarding risk behaviours and knowledge, attitudes, and awareness of health-related topics of importance to public health.

RRFSS consists of ‘core’ and ‘optional’ modules. All participating health units ask core modules selected by RRFSS representatives from all participating health units. Each health unit selects additional optional modules, until the average interview length reaches 20 minutes. Any participating health unit can initiate or create new optional modules.

The survey cycle begins each January. In a typical cycle, 100 interviews are completed in each of the following 12 months, for a total of 1,200 interviews per year in each participating health unit. Health units receive the data in SPSS format from ISR approximately two months after each month of data collection.

To assist in coordinating activities required by RRFSS, each participating health unit identifies a RRFSS representative, often the epidemiologist or data analyst involved in analysis and reporting of RRFSS results. An additional position of provincial RRFSS coordinator has existed since June 2003. Participating health units share the cost of the RRFSS coordinator. The coordinator works with the RRFSS Steering Group to facilitate the planning, organization, coordination and maintenance of RRFSS. The coordinator represents and acts on behalf of all RRFSS members and seeks new opportunities to promote RRFSS.

RRFSS representatives meet in Regional Working Groups, of which there are four. The provincial Steering Group comprises one RRFSS representative from each Regional Working Group, together with the provincial RRFSS coordinator and members of ISR. There are other working groups whose activities and membership vary. The Analysis Group sets out analysis guidelines, reviews data.
dictionaries and responds to analysis issues. The Website Group manages the RRFSS website. The Workshop Planning Group plans and implements the annual RRFSS Workshop. Other ad hoc committees, such as the Website Evaluation Advisory Group responsible for this project, are created as needed.

1.2 History of RRFSS

RRFSS was initiated as a pilot project to conduct a survey of health-related risk factors in Durham region from June to October 1999. The intent of the survey was to fill a need for ongoing, timely risk factor surveillance data at the health unit level. Timely data at the health unit level were not readily available from the national survey then in place (National Population Health Survey 1996/97) or the one under development (Canadian Community Health Survey 2000/01). The pilot survey was modeled on the Behavioral Risk Factor Surveillance System (BRFSS) carried out by the US Centers for Disease Control and Prevention (CDC). The Laboratory Centre for Disease Control of Health Canada, the Ontario Ministry of Health and Long-Term Care (MOHLTC), Cancer Care Ontario, and the Durham Region Health Department were partners in the pilot project.

The successful pilot project prompted the establishment of a RRFSS Working Group, consisting of representatives of the Durham Region Health Department, the Haliburton, Kawartha, Pine Ridge District Health Unit and the Simcoe County District Health Unit. The Working Group revised the questionnaire, developed data dictionaries and encouraged other health units to participate. By the end of 2001, 12 health units were involved in RRFSS.

In 2001, funding for Perinatal and Child Health Survey Strategies was announced by the provincial Minister Responsible for Children and the Minister of Health and Long-Term Care. All Ontario health units were eligible and many used part of the funds received under this program to become involved in RRFSS. Consequently, the number of participating health units grew to 21 in 2002 and 24 in 2003. Participation has remained relatively stable since then, including 21 health units in 2007. See Appendix A for a list of RRFSS-participating health units in 2007.

1.3 Origins of the RRFSS Website

The RRFSS Pilot Evaluation in 1999/2000 concluded that RRFSS had been successful and recommended a variety of methods to disseminate project results, including development of a RRFSS website. The website was first established in 2000 using pilot data, in partnership with the now-discontinued Central East Health Information Partnership (CEHIP). CEHIP supported a student placement in 2001 to develop methodological guidelines and a system for analyzing and posting core prevalence data on the website, and the website expanded with CEHIP’s assistance. The RRFSS Website Group was established in this period to guide and oversee the maintenance and development of the RRFSS website.
The RRFSS website continues to be a valuable resource for Ontario public health units. Ontario Public Health Standards (OPHS) specify programs and services all boards of health must provide. OPHS emphasize that data to inform decision-making at the local level should be derived from a range of provincial and local indicators using identified data sets and methodologies. RRFSS provides timely data relevant to local public health needs, and results are used to support program planning and evaluation, advocate for public policy development and improve community awareness. The RRFSS website is an important tool to meet these goals, and thus plays a significant role in assisting participating health units to meet OPHS requirements and especially the Foundation Standard.

1.4 Previous RRFSS Evaluations and the RRFSS Website

1.4.1 2001/2002 Evaluation

By the end of 2001, RRFSS comprised 12 participants. An Evaluation Subgroup of the RRFSS Working Group was formed, joined by a member from the Public Health Research, Education and Development (PHRED) program. PHRED is a collaboration among Ontario boards of health, university health science programs and MOHLTC to foster research and educational opportunities in Ontario public health units.

With the assistance of an evaluation consultant, the Evaluation Subgroup conducted an evaluation in 2001/2002, identifying 14 key issues relating to RRFSS effectiveness, improvement and sustainability. A general recommendation was made to upgrade the RRFSS website. In addition, results indicated a wish to improve data sharing among organizations.

1.4.2 2005/2006 Evaluation

The second main evaluation of RRFSS took place in 2005/2006. Among other objectives, the evaluation aimed to see whether recommendations of the 2001/2002 evaluation had been implemented. The 2005/2006 evaluation was conducted by a RRFSS Evaluation Group, consisting of representatives from each Regional Working Group, the RRFSS coordinator and members of PHRED.

Data were collected from 32 of the 36 Ontario Health Units, from multiple stakeholders including RRFSS representatives, medical officers of health (including associates), program and research staff, epidemiologists or program evaluators in health units not currently participating in RRFSS, representatives of partner and external agencies including MOHLTC and ISR, and the RRFSS coordinator.
The following recommendations related to the website emerged from the evaluation:

- that provincial funding be provided to maintain the RRFSS website, including funds to support a webmaster and to hold the annual RRFSS workshop, and
- that the RRFSS dataset be made available free of charge (except for administrative charges) to external, non-profit agencies for regional and provincial level analyses, but only for purposes that are consistent with the public health mandate.

The 2005/2006 Evaluation Report also made reference to the following issues respecting the RRFSS website:

- Some medical officers of health in RRFSS-participating health units suggested updating and improving the RRFSS website and providing public access to all results via the website.
- Health unit program and research staff identified needs including website access to reports.
- Staff in health units unable to disseminate RRFSS results felt that they needed more staff resources in areas including website management.
- RRFSS representatives recommended that to make results usable, they be formatted in such a way as to be posted on a website.
- RRFSS representatives indicated insufficient resources to meet the related costs of RRFSS including web design.

1.5 Website Best Practices

1.5.1 User-Centred Design and Website Usability

The International Standards Organization (ISO) definition of usability refers to the effectiveness, efficiency and satisfaction with which intended users can perform realistic tasks in context. ISO Standards on Human-Computer Interaction reflect the work of the user-centred design movement.

The user-centred design movement arose out of interest in human-computer interfaces, and usability engineering methods came to be applied in the design and testing of software systems for ease of use, ease of learning, lack of errors, and user satisfaction. Usability design principles originally developed for designing software user interfaces came in the 1990s to be increasingly applied to the design of usable websites.
Badre\textsuperscript{4} outlines important principles of website usability. They include:

- user-centred design, which involves defining the user culture, including user characteristics, user types, levels of expertise, and user task descriptions, and
- iterative design and continuous testing, which is usually needed to take full advantage of technical capabilities and create an environment compatible with human systems of information acquisition, processing and representation.

Website usability principles emphasize the importance of learning about website users – who they are and how they use websites – and applying what is learned about users to improve their website user experience. There are many proven techniques for learning about website users and how they use websites, including user interviews, online surveys, card sorting exercises and usability task analyses.

1.5.2 Website Usability Analysis

Both quantitative and qualitative techniques can be used in analyzing website usability. Usability expert Jakob Nielsen employs both techniques in his extensive research, but warns that “number fetishism leads usability studies astray by focusing on statistical analyses that are often false, biased, misleading or overly narrow. Better to emphasize insights and qualitative research.” He notes further that “design research is not like medical science: ethnography is its closest analogy in traditional fields of science.”\textsuperscript{6}

Usability literature also advocates an iterative approach. An iterative cycle of design changes and evaluation to see if goals are met allows for richer use of qualitative analysis, as potential improvements can be implemented or tested and their effectiveness gauged by obtaining feedback and observing actual website use.
1.5.3 Help Users to Accomplish Tasks Easily and Efficiently

Website user experience expert Gerry McGovern writes that the web “is task focused. The best websites get to the point. They ruthlessly eliminate waffle and happy talk. They focus on helping people complete key tasks as quickly as possible. The Web is a selfish place. People don’t have time…. They…care about what you can do for them.”

There are several ways in which websites can be designed to allow users to complete tasks easily and efficiently.

*Create a clear visual hierarchy on each page*

One of the best and simplest ways to make a page easy for users to understand quickly is to ensure that the appearance of items on the page clearly and accurately portrays the relationships between the items on the page.

On pages with a clear visual hierarchy, the more important something is, the more prominent it is, that is, it is larger, bolder, in a distinctive colour, set off by more white space, nearer to the top of the page, or a combination of these traits. In addition, things that are related logically are also related visually, as, for example, by grouping them together under a heading or displaying them in a similar visual style. “When a page doesn’t have a clear visual hierarchy – if everything looks equally important, for instance – we’re reduced to the [slow] process of scanning the page for revealing words and phrases, and then trying to form our own sense of what’s important and how things are organized.”

*Use website conventions*

Nielsen has observed that “individual project teams are not designing the Web any more than individual ants are designing an anthill. Site designers build components of a whole, especially now that users are viewing the entirety of the Web as a single, integrated resource. Unfortunately…many sites don’t fit into the big picture, and are too difficult to use because they deviate from expected norms.”

Web design and usability experts increasingly recommend that individual websites use standard design elements. These help to ensure that users know what features to expect, and increase “their sense of mastery over the website…, their ability to get things done…, and their overall satisfaction with the experience.”

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**Jakob’s Law of the Web User Experience**

“Users spend most of their time on other sites. Thus, anything that is a convention and used on the majority of other sites will be burned into the users’ brains and you can only deviate from it on pain of major usability problems.”

*J. Nielsen, 1999*
Nielsen defines a standard as a design approach used by 80% or more of websites, and a convention as an approach used by 50-79% of websites. His research identified the following standards and conventions.

Standard design elements include:

- a logo in the upper left corner of the page,
- a search box on the homepage, and
- breadcrumbs listed horizontally (when they are used).

Conventional design elements include:

- using the label "site map" for the site map (recommended from user research on site map usability), and
- changing the color of visited links (recommended to assist navigation).

**Make clickability obvious**

A common problem experienced by web users is that it is not always clear which text is a hyperlink that can be clicked. “When you force users to think about something that should be mindless like what’s clickable, you’re squandering the limited reservoir of patience and goodwill that each user brings to a new site.”

In the early days of the Internet, it was standard practice that blue, underlined text was used for unvisited hyperlinks. For this reason, blue text should not be used for anything but links, and designers should avoid underlining anything other than links.

Over time, users have become accustomed to other link formats, so long as they are made to stand out by using distinctive font sizes or styles to differentiate it from non-link text. The best way to clearly indicate clickability remains to colour and underline the link text, although underlines can be safely eliminated in the case of lists of links and navigation bars. However, if you’ve opted to present links with less than the maximum perceived clickability, you can recover some of the lost usability by signaling clickability when the user hovers over the link. For example, if your links aren't underlined, you can make an underline appear while hovering.

“Long, rambling text frustrates [users]. In general, the word count for Web content should be about half of that used in conventional writing. Cutting back is easier said than done. It takes courage and practice to carve your writing down to the essentials. But cutting back on word count doesn’t mean leaving out important details. When done well, trimmed and scannable content conveys the same information and is more helpful to your readers.”

*Nielsen & Loranger, 2006*
Simplify content presentation

Good writing tailored to the needs of website users helps them to find what they are looking for more easily. Good web writing practice recognizes the following:

- Users skim headings looking for specific topics, so subheadings should be used liberally.
- A heading is best formatted as a separate line, or as a lead-in sentence to a paragraph.
- Bold text stands out, and thus it is best to use it sparingly. Bold words scattered inside the text can be confusing.
- Italics and not underlining should be used for emphasis, to avoid confusion with clickability.
- Users read bulleted text, so where appropriate, important points should be condensed in bulleted lists.

“Establishing more than one way to access the same information can help some users find what they need. When certain information is critical to the success of the Web site, provide more than one link to the information. Different users may try different ways to find information, depending on their own interpretations of a problem and the layout of a page. Some users find important links easily when they have a certain label, while others may recognize the link best with an alternative name.”

Research-Based Web Design & Usability Guidelines, 2006

Greet users with a link-rich home page

At first glance, a link-rich home page seems to violate a basic tenet of web design – simplicity. And yet such a home page, if constructed right, can be an effective tool for users. “The secret…is the link clusters. Users look at each cluster and quickly decide whether the cluster is likely to contain their content or not. By focusing on just one or two clusters, users winnow down their choices to just a handful of links.” The key is to design a home page that will grab users’ attention and provide them with a wealth of information, while ensuring that its format is easy to use and easy to navigate.

Let users know where they are and where they’ve been

Website usability requires that users have a good understanding of their current location within a website and of areas already visited. Knowing past and present locations can make it easier to decide where to go next. In addition, knowing which pages have already been visited frees users from unintentionally revisiting the same pages over and over again.
Well-defined techniques for indicating current position and navigation history include:

- navigation bars incorporating text links that highlight the page the user is currently viewing,
- location breadcrumbs (a bar at the top of a web page showing the trail of pages that lead from the home page to the current page), and
- links that change colour when visited.

**Order content in ways that make sense to users**

A website should present information in a structure that reflects user needs and perceptions. Information should be well-organized at the level of the website, the web page and the paragraph or list. Good content organization enables users to understand the nature of the website’s organizational relationships, helps users to locate information efficiently, and reduces user frustration. As individual pages are added to a website site, it is important not simply to group the pages into categories that make sense to the web designer. Users may not share the same mental model of the site content.

**Provide users with multiple ways to access desired information**

Although web designers may envision a typical user to help guide their design decisions, in reality there is no such thing as an average user. Users may differ in many ways, including knowledge and experience, computer hardware and software, and goals for visiting a particular website. It is important to acknowledge that just as there is no average user, there is no means of locating information that will suit all users. The more options a website is able to provide to a user to find desired information, the more likely that user is to succeed.

Establishing more than one way to access the same information can help some users find what they need. Tools to assist in accomplishing a specific task on a website include home page links, navigation bars, site maps, and search functions. To the greatest extent possible, all of these options should be made available for users.
2. GOALS

RRFSS participants recognize that dissemination of results has the potential to be greatly improved by enhancement of the RRFSS website. Although the 2006 RRFSS Evaluation identified website enhancement as a need, the nature of improvements was not specified.

In 2007, funding was received from the Public Health Agency of Canada (PHAC) Enhanced Chronic Disease Surveillance Grant program to evaluate the existing RRFSS website, to identify effective website enhancements, to implement selected enhancements within the project timeframe and to make recommendations for future enhancements.

Building on the results of the RRFSS Evaluation 2006, the following goals were developed:

1. to define the RRFSS website’s purpose and target users,
2. to evaluate the usability of the RRFSS website and recommend improvements to better meet target users’ needs,
3. to enhance the RRFSS website and evaluate the effectiveness of improvements, and
4. to provide the foundation for ongoing improvement of the RRFSS website.

2.1 Evaluation Advisory Group

The RRFSS Website Evaluation Advisory Group (“Advisory Group”) comprised a member of PHRED, the provincial RRFSS coordinator and four RRFSS representatives, one from each RRFSS Regional Group.

Terms of Reference for the Advisory Group are presented in Appendix B.

2.2 Objectives

The following objectives developed from project goals are addressed in this report:

- to identify users of the current RRFSS website and describe how it is used,
- to prepare a Statement of Purpose for the RRFSS website and identify its target users,
- to identify barriers to using the current RRFSS website,
- to gather suggestions for website improvements from RRFSS members and other website users,
- to recommend short- and long-term improvements to the RRFSS website,
- to implement short-term improvements to the non-prevalence-data sections of the RRFSS website,
- to evaluate the enhanced RRFSS website, and
• to outline a plan for ongoing maintenance, support and improvement of the RRFSS website.

A companion report addresses the following objectives:

• to develop and implement a query-based prevalence data system, and
• to outline a plan for ongoing maintenance, support and improvement of the query-based prevalence data system.
3. METHODS

3.1 Evaluation Framework

After developing objectives from project goals, outcomes were described. Methods or activities to be carried out to achieve desired outcomes were then identified, and tasks assigned to the Project Manager and to consultants. Advisory Group members provided advice and input to the Project Manager and consultants during all stages of the project. Table 1 presents the evaluation framework, including goals, objectives, methods/activities, staff, and outcomes.

Table 1 - Evaluation Framework

<table>
<thead>
<tr>
<th>Goals</th>
<th>Objectives</th>
<th>Method/Activities</th>
<th>Staff</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To define the RRFSS website’s purpose and target users</td>
<td>To identify users of the current website and describe how it is used</td>
<td>• Telephone interviews</td>
<td>Project Manager</td>
<td>• Detailed description of users of current website and how it is used</td>
</tr>
<tr>
<td></td>
<td>To prepare a website Statement of Purpose and identify target users</td>
<td>• Review of existing RRFSS documentation</td>
<td>Project Manager</td>
<td>• Website Statement of Purpose and prioritized list of target users</td>
</tr>
<tr>
<td>2. To evaluate the usability of the RRFSS website and recommend improvements to better meet target users’ needs</td>
<td>To identify barriers to using the current RRFSS website</td>
<td>• Telephone interviews</td>
<td>Project Manager</td>
<td>• Report detailing results of website evaluations</td>
</tr>
<tr>
<td></td>
<td>To gather suggestions for website improvements from RRFSS partners &amp; other users</td>
<td>• Telephone interviews</td>
<td>Project Manager</td>
<td>• Prioritized list of recommended improvements to the RRFSS website’s content, format and navigational structure</td>
</tr>
<tr>
<td></td>
<td>To recommend short- and long-term improvements to the website</td>
<td>• Development of prioritized list of improvements based on review and analysis of evaluations</td>
<td>Project Manager</td>
<td></td>
</tr>
<tr>
<td>3. To enhance the RRFSS website and evaluate the effectiveness of improvements</td>
<td>To implement short-term improvements to the non-prevalence-data sections of the website</td>
<td>• Revision of non-prevalence-data sections of the website</td>
<td>Project Manager/BrickHost</td>
<td>• Enhanced website, including query-based system for presentation of prevalence data</td>
</tr>
<tr>
<td></td>
<td>To develop and implement a query-based prevalence data system</td>
<td>• Revision of prevalence data section of website</td>
<td>Prevalence Data Consultant/BrickHost</td>
<td>• Evaluation of enhanced website</td>
</tr>
<tr>
<td></td>
<td>To evaluate the enhanced website</td>
<td>• Usability testing</td>
<td>Project Manager</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Online survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Regional Groups input</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. To provide the foundation for ongoing improvement of the RRFSS website</td>
<td>To outline a plan for ongoing maintenance, support and improvement of the website</td>
<td>• Research and analysis of best practices, which may include feedback button, periodic online survey</td>
<td>Project Manager/BrickHost</td>
<td>• Report outlining plan for ongoing maintenance, support and improvement of the website</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Research and analysis of cost and resource issues and consultation with RRFSS partners</td>
<td></td>
<td>• Report outlining plan for ongoing maintenance, support and improvement to the query-based prevalence data system</td>
</tr>
</tbody>
</table>
3.2 Evaluation Methods and Tools

Four methods were used to evaluate the RRFSS website prior to the implementation of enhancements: a telephone interview of RRFSS members, an online survey, usability testing, and a card sorting exercise. After implementation of enhancements, feedback on the enhanced website was sought from RRFSS Regional Groups.

3.2.1 Telephone Interviews of RRFSS Members

RRFSS members were interviewed by telephone. The interview asked about respondents’ use of and experiences with the RRFSS website, their opinions about the prevalence data and members only sections of the website, their views on the website’s intended users and purpose, and their suggestions for improvements to the website. See Appendix C for interview questions.

The Project Manager pilot tested the questionnaire on 4-5 October 2007 in telephone interviews with two health unit staff members who had previous involvement in the RRFSS project and with the Chair of the Advisory Group. No substantive changes were made to the questionnaire as a result of the pilot testing, although some text was added for clarification and to improve the flow of questions.

The Project Manager then interviewed 30 members of the RRFSS partnership: representatives, alternates, dataset contacts, and the RRFSS coordinator. Telephone interviews were completed by 26 October 2007, and ranged in length from 20-50 minutes, with an average length of 35 minutes.

The Project Manager recorded each respondent’s answers on a paper copy of the questionnaire, and transferred responses to an electronic copy following each telephone interview. The transcript was then emailed to each respondent, who was asked to review it for accuracy and report any changes or corrections. Minor changes and corrections were made, and finalized copies of completed questionnaires were used for summary and analysis.

See Appendix D for the text of emails sent to interviewees to inform them of the interviews, to provide additional information about the interviews, and to accompany the interview summaries.

3.2.2 Online Survey

The online survey asked visitors their reasons for visiting the website and whether they were repeat visitors, and gave them an opportunity to make additional comments about the website. See Appendix E for the online survey text and screen captures of the survey in its final form as seen by visitors to the website.
The online survey appeared to visitors in the form of a single-page pop-up window consisting of four questions. Certain answers triggered additional questions. For example, a visitor who answered “Yes” to the question of “Have you visited the RRFSS website before?” would then see the question “On your last visit to the RRFSS website, were you able to find what you were looking for?”

Once activated, the online survey appeared to each visitor to the RRFSS website. Each visitor was given the option to proceed to the survey or to complete it on their next visit. If a visitor completed the survey, it would not reappear on subsequent visits to the website. If the visitor did not complete the survey, it would reappear on subsequent visits until it was completed.

The online survey was active from 5 December 2007 to 5 March 2008.

### 3.2.3 Usability Testing

In usability testing, representative users are asked to perform typical tasks using a website while their activity is monitored. The goal of testing is to identify any problems that representative users have in using the website, to collect data on user performance, and to determine user satisfaction with the website.

Three usability tests were prepared, each with a different representative user in mind: RRFSS representatives, health unit program staff, and epidemiologists or health researchers from non-RRFSS-participating health units. See Appendix F for usability test instructions and questions.

The usability tests were designed to be administered by telephone. Participants were asked to perform a series of tasks at their computers, describing their actions and thoughts over the telephone to the Project Manager, who, following along on her own computer, recorded the steps they reported taking and the thoughts they expressed.

The first usability test consisted of five tasks that a typical RRFSS Representative might want to carry out using the RRFSS website. Usability Test A was pilot tested on 12 November 2007 with a member of the Advisory Group who had not previously seen the list of usability tasks. No changes were made to the usability test as a result of pilot testing. The Project Manager then conducted the usability test by telephone over the period 15-21 November with four randomly-selected RRFSS Representatives.

The second usability test consisted of four tasks that a typical Health Unit program staff member might want to carry out using the RRFSS website. Usability Test B was pilot tested on 13 November with a program staff member at Kingston, Frontenac, and Lennox & Addington Public Health. No changes were made to the usability test as a result of pilot testing. The Project Manager then conducted the usability test by telephone over the period 15-21 November with
two Health Unit program staff recruited to participate by members of the Advisory Group.

The third usability test consisted of four tasks that an epidemiologist from a non-RRFSS-participating Health Unit might want to carry out using the RRFSS website. Usability Test C was pilot tested on 13 November with a member of the Advisory Group who had not previously seen the list of usability tasks. No changes were made to the usability test as a result of pilot testing. The Project Manager then conducted the usability test by telephone over the period 15-21 November with an epidemiologist and a health analyst from non-RRFSS-participating Health Units recruited to participate by the Chair of the Advisory Group.

3.2.4 Card Sorting

Card sorting is a process that asks participants to sort a series of cards, each labeled with a piece of content, into groups that make sense to them. It is a reliable and inexpensive method to identify patterns in user expectations of the grouping of content.

The Project Manager prepared a basic card-sorting activity with the assistance of three Advisory Group members. See Appendix G for card sorting instructions and questions.

The card sorting activity was pilot tested with a RRFSS Representative on 12 November 2007. As a result of the pilot test, minor changes were made to the instructions for clarification. The card sorting instructions and materials were then mailed to four RRFSS Representatives, one from each RRFSS region. The four RRFSS Representatives had been selected at random from among those who had not participated in usability testing.

Participating RRFSS Representatives carried out the card-sorting activity independently and returned the results to the Project Manager by mail. All results were received by 26 November. The Project Manager prepared a list of card groupings and group titles provided by each participant, and compared the results to identify common groupings and group types and titles.

3.3 Limitations

3.3.1 Telephone Interviews

Telephone interviews with RRFSS members were conducted in October 2007 prior to changes to the RRFSS website, while Regional Group feedback on the website changes was sought in March 2008. Due to changes in health unit participation - one health unit left the RRFSS project at the end of 2007, and a new health unit joined in 2008 – and staff turnover, the group of individuals who
provided Regional Group feedback differed from the group interviewed. Some Regional Group members, while able to comment on the updated website, were unfamiliar with the previous version and thus could not make a comparison. In addition, due to the cancellation of the March meeting of one of the four Regional Groups, feedback was not received from members of that group.

3.3.2 Online Survey

A pop-up online survey has several limitations:

- A visitor’s browser might be set to reject cookies, or the visitor might delete cookies upon closing the browser, thus resulting in reappearance of the online survey in subsequent visits even though it had already been completed.
- A visitor’s computer might automatically block pop-ups, in which case the survey would appear only if the visitor chose to accept the pop-up.
- A cookie cannot distinguish between different visitors using the same computer, and thus the survey might be completed by a single user of a computer shared by several users.
- A visitor might choose not to complete the survey.

Despite these limitations, it was felt that although the survey would not reach a complete sample of website visitors, it would still be a useful and cost effective means to help identify types of users visiting the RRFSS website.

3.3.3 Card sorting exercise

Four RRFSS representatives participated in the card sorting exercise. A larger number of participants might have given clearer and more comprehensive results. However, the Advisory Group acknowledged the busy schedules of RRFSS representatives, and felt that it would be inappropriate to make excessive demands on their time, and thus only six were asked to participate in this exercise. Four participated, one assisted with the pilot test, while another was unavailable.

3.3.4 Implications for Interpretation of Results

There is no one formula for creating a useful website, and specific issues that can be identified by a formula provide limited insight. The process instead involves learning about website users, how they use the website, and what they would like to be able to do with the website, and considering this information in light of website best practices and technological and resource constraints. Evaluation tools employed in this project are useful means of learning about the RRFSS website, and results are interpreted with awareness of their methodological limitations.
4. EVALUATION OF THE RRFSS WEBSITE

4.1 Website Users and Use

4.1.1 Who uses the website?

*Telephone Interviews of RRFSS Members*

All respondents indicated that they use the RRFSS website. On average, the respondents had been involved with RRFSS for just over four years. Of the 30 respondents' job titles, 21 identified themselves as epidemiologists, seven as research, data or health analysts, and two as other. There was at least one respondent from each of the 21 RRFSS-participating health units.

Eighty percent (24 respondents) said that they had directed other health unit staff to the website. All but one of the 24 had directed health unit program staff to the website, while eight had directed management staff to the website. Health unit staff were most often directed to questionnaires, prevalence data, general background information, and during orientation.

Just under half of the respondents (14) also indicated that they had directed individuals other than health unit staff to the RRFSS website. Nine had directed students and/or academic researchers to the website, two had directed members of the general public to the website, and other groups mentioned once each include MOHLTC staff, allied health professionals, community partners interested in making external data requests, local politicians and bureaucrats, and staff of nonprofit organizations. These individuals were most often directed to the website for general background information (9). Other responses included prevalence data and questionnaires.

*Online Survey*

Of 27 respondents to the online survey, 13 indicated that they worked for an RRFSS-participating Health Unit, and of those, six indicated that they were RRFSS Representatives or Alternates. Responses indicated that one visitor was a student/educator from a university, one worked for a Local Health Integration Network (LHIN), and one worked for a hospital. The remainder did not identify their position or employer.

*Summary*

Evaluation results indicate that the RRFSS website is primarily used by RRFSS members, health unit staff, and by students and academic researchers. Other groups, including government staff, staff of nonprofit organizations, and members of the general public, use it only infrequently.
4.1.2 How often do users visit the website?

*Telephone Interviews of RRFSS Members*

On average, over the course of the previous year, questionnaire respondents visited the RRFSS website 4.7 times per month, or approximately once per week. The most frequent visitors visited the website 20 times per month, while the least frequent visitors visited less than once per month.

*Online Survey*

Although the online survey did not ask about visit frequency, respondents were asked whether this was their first visit to the RRFSS website, and responses indicated that two thirds of respondents (18 of 27, or 67%) were repeat visitors.

4.1.3 Why do infrequent users not visit the website more often?

*Telephone Interviews of RRFSS Members*

Of the nine questionnaire respondents who indicated that they used the website less than once per month, four indicated that RRFSS was not the primary focus of their current job, three that they have access to the information they need elsewhere, one that a staff member visited the website when information was needed, and one that there was no need to visit the website more frequently.

4.1.4 What are website users looking for?

*Telephone Interviews of RRFSS Members*

The responses of RRFSS members indicated that by far they most commonly look for questionnaires (83%, or 25 respondents) and data dictionaries (80%, or 24 respondents). Twelve responded that they look at the website for prevalence data, while technical information, contact information and workshop information were each mentioned by two respondents.

The frequency with which RRFSS members visit sections of the website is presented in Chart 1. Data dictionaries and questionnaires were the sections most often visited.
Online Survey

Of 27 responses, data dictionaries were most often mentioned (by five respondents). There were a variety of other responses, including questionnaires, the RRFSS logo, specific prevalence information, general information, and “just exploring.” In addition, three visitors appear to have been looking for information not found on the website: HIV information, GIS information, and information on rates of physical activity and high blood pressure in Ontario.

4.2 Website Usability

4.2.1 Do website users easily find what they are looking for?

Telephone Interviews of RRFSS Members

Sixteen respondents (53%) strongly agreed with the statement that “Information on the website can be located easily,” 12 (40%) agreed, and two (7%) disagreed. No-one strongly disagreed with the statement.

Respondents who disagreed with the statement were asked what problems they have had in finding information on the website. Responses were also recorded for those respondents who agreed or strongly agreed with the statement but who
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

offered comments. Five respondents in total offered comments. Two respondents commented that the prevalence data are not ordered in a useful way, and two respondents observed that a search function would be helpful. Additional comments mentioned by individual respondents include the observations that questionnaires and data dictionaries are not ordered in useful way, that the respondents would like to see more technical and administrative documents available, and that it is difficult to locate some technical information.

Online Survey

Of the 27 respondents, just over half (14) indicated that they had been able to find what they were looking for on their last visit to the website, one was not able to do so, and the remainder did not comment.

Usability Testing – RRFSS Representatives

None of the four RRFSS representatives had difficulty finding the percentage of adults in Kingston who received a flu shot in 2002 and in 2006. All cited their experience in performing similar tasks using prevalence data in the past as their reason for finding this task straightforward. However, they did observe that the task might be considerably more difficult and time consuming for someone unfamiliar with the navigation structure of the prevalence data section and with terminology used (e.g. “City of Kingston” and not simply “Kingston”). One participant indicated that a query system would make it considerably easier and quicker to find the information.

Somewhat more difficult for participants was finding whether RRFSS respondents from Sri Lanka are given the choice to identify themselves as Tamil or only as Sri Lankan. Two were able to find the information in the questionnaires section without undue difficulty. One found the information after much digging, while one could not find the information. The latter concluded that the information was not available when looking in the questionnaire list and finding no listing for “demographic.” The ethnicity module is listed under “socio-demographic.”

Difficulty was also encountered finding the exact wording of the RRFSS survey question asking how many cigarettes the respondent smokes. Although all participants went to the questionnaires list, two were unable to complete the task because the information was found not in the module “Tobacco Use by Respondent,” the first place that all participants turned to find the information, but instead in the module “Tobacco Dependency.” The two participants who were able to find the information nonetheless suggested that a search function might be helpful to speed up the process.

It was expected that respondents would look for the month and year in which questions about post-partum depression were first included in the RRFSS questionnaire in the RRFSS Inventory found in the Technical Information section.
All participants first turned to the data dictionary, and two observed that to answer this question in a non-test setting, they would turn to the Qmaps document, which is not currently available on the website. When the participants did not find the information in the data dictionary section, spending considerable time looking through the section in detail, three concluded that it was thus not available on the website, while a fourth was able to locate the information in the technical information section. This task elicited particular frustration from one participant, who reasoned that perhaps the information was not available because the module had not been finalized, or had been finalized but was not yet posted.

Participants took different initial approaches to find out how to cite the online RRFSS questionnaire in published material. One looked first at FAQs for Public Health Units, another looked first at About RRFSS, and two looked first at Technical Information. Two could not find the information on the website and one would refer to the Manual of Operations (MOO) to find the information in a non-test setting, while two eventually logged onto the Members’ Area and found the information in the MOO. None of the participants found the information where it is posted, in the public area of the website, under FAQ for Interested Researchers.

Participants expressed surprise at the difficulty they had in completing the tasks, although they did agree that the tasks were representative of information that they might have to find. For some questions, some said that they would tend to refer to their own files to find the information, but that they assumed it would also be available on the website. Three made specific reference to a search function, two indicating that they would use it if they could not find the information they were seeking through navigating the website, and one indicating a tendency to use the search function first.

"I was surprised at how challenging these tasks were. They are tasks that all RRFSS Representatives should be able to do easily on the website."

Usability test respondent

Usability Testing – Health Unit Program Staff

All three program staff found the assigned tasks relatively easy to complete, and found what they were looking for on their first or second try. While they did not have any difficulty in finding out whether the percentage of adults in Kingston getting a flu shot was similar to the percentage in Ottawa in 2002, they did observe that it would be preferable to be able to observe both values on the same screen. In addition, one participant had specific suggestions to make the website even more straightforward to use, including a search function, intermittent links to return to the top of a long page and to the home page, and a feature where a visitor could mouse over a section name in the navigation bar and see a brief description of contents.
Usability Testing – Staff of Non-RRFSS-Participating Health Units

The first participant completed all four tasks successfully, although with some effort, while the second participant completed three of the tasks but was unable to locate the exact wording of the RRFSS survey question asking how many cigarettes the respondent smokes. Intuitively, both subjects thought the information should be contained in the module “Tobacco – Use by Respondent,” but only one was able to subsequently find it in “Tobacco Dependence.” This difficulty points to a need for a clearer definition of module contents, clearer naming of modules, and/or a search function. Both found the remaining tasks easy to perform.

Summary

RRFSS members seeking specific information on the website face significant hurdles, especially those who are less familiar with the website. Reorganization of material into groupings and categories that make more sense to these users would improve navigation and cut down on the time required to find specific information. Clearer labels, prominent indexes and related finding aids, and a search function are all needed to make the website a comprehensive source of easy-to-find information for this primary user group.

“I thought the website was intuitive, but these tasks have made me re-think it.”

Usability test respondent

“I am interested in further exploring the RRFSS website - I did not realize it would be so easy to use.”

Usability test respondent

Usability tests indicate that for website visitors who are not RRFSS members and who are looking for general information, most information can be found with relative ease, although improvements made to meet the needs of RRFSS members would also make their tasks easier to perform. Reorganization of material, clearer labeling, finding aids such as lists of questions by module, and a search function would all improve the experience of these visitors.
4.3 User Satisfaction and Suggestions for Improvement

4.3.1 How satisfied are users with the overall website?

*Telephone Interview of RRFSS Members*

Nine of the 30 respondents reported that they were very satisfied with the website, 17 somewhat satisfied, four somewhat dissatisfied, and none very dissatisfied.

*Online Survey*

Of 14 comments on overall satisfaction, six reported that they were very satisfied with the website, seven somewhat satisfied, and one somewhat dissatisfied.

4.3.2 How satisfied are users with the timeliness of information?

*Telephone Interview of RRFSS Members*

Of the 30 respondents, one strongly agreed with the statement “Information on the RRFSS website is up-to-date,” 16 agreed, 11 disagreed, and two strongly disagreed.

Those who disagreed or strongly disagreed were asked about their concerns about the timeliness of information on the website, while others’ comments were recorded if volunteered. The most common response, from nine respondents, was that data dictionaries are not up to date. Other responses included:

- Questionnaires are not up to date.
- I do not know if the version of a data dictionary and/or questionnaire posted on the website is the most recent version.
- Questionnaires and/or data dictionaries are not always available for all modules.
- Prevalence data could be posted more quickly.
- Workshop information is not up to date.

4.3.3 How satisfied are users with the format/appearance of the website?

*Telephone Interview of RRFSS Members*

Half of respondents strongly agreed that “the RRFSS website (layout, colours and font) is easy to read.” 40% (12 respondents) agreed, 7% (2 respondents) disagreed, and none strongly disagreed.
Usability Testing

These views were echoed in spontaneous comments by usability test participants. In general, users express a positive opinion of the website’s general appearance.

4.3.4 How satisfied are users with the quality of information on the website?

Telephone Interview of RRFSS Members

One third of respondents strongly agreed with the statement that “The RRFSS website provides high-quality information,” 57% (17 respondents) agreed, 10% (3 respondents) disagreed, and none strongly disagreed.

Two respondents expressed strong concern that the current system for verifying data is not systematic and complete, while one expressed strong concern that the posted prevalence data are not analyzed according to RRFSS guidelines, and thus differs from results as analyzed within individual health units. This issue was also brought up by several other respondents later in the telephone interviews.

One respondent also made detailed and specific comments regarding posted data dictionaries, noting that data dictionary pages:

are bogged down with out-of-date information (i.e. comparability with other survey information, validation/reliability studies, and cognitive testing results). It's not that this information isn't relevant, but since the data dictionary pages lag time is about 6-12 months after the module is in the field, this information is more useful at the module development phase. It would be great if this was required information in the module submission process. There are also differing formats, inconsistency in reporting of the information, and duplicated information. There is also a large section on what each question is. This information is already found in the user-friendly version. Perhaps the user-friendly version could be linked to the indicator information of the data dictionary pages, thus reducing duplication of information.

“I do not want to direct health unit staff to the prevalence data section of the RRFSS website, since I am worried that they may not interpret the data correctly.”

“I am reluctant to direct others to the RRFSS website to look at data, but I also worry about explicitly warning them not to….. I worry about credibility, because no-one is in charge of ensuring the accuracy of posted prevalence data.”

Telephone interviewees
4.3.5 How satisfied are users with the prevalence data section of the website?

Telephone Interview of RRFSS Members

23% (7 of 30 respondents) strongly agreed that “the prevalence data section on the RRFSS website is useful,” 43% (13 respondents) agreed, 27% (8 respondents) disagreed, one respondent strongly disagreed, and one did not know or had no opinion. The most frequent comments were:

- Data are not analyzed according to RRFSS guidelines.
- The prevalence data section is difficult to navigate, requiring much clicking and scrolling.
- Concerns about the data verification procedure and accuracy of posted data.
- It takes too long to update the data.
- Results are not in a format that can be cut & pasted or downloaded.
- Data should be analyzed and verified centrally.

Four fifths of respondents indicated that they would like to see prevalence data presented differently than they are currently presented on the website. Four respondents were satisfied with the current presentation, and two did not know or had no opinion.

Comments on how they would like the prevalence data to be presented included the following:

- The navigation structure should be improved to reduce excessive clicking/scrolling.
- Trend analysis should be provided.
- A printer-friendly option should be available.
- It would be helpful to be able to view data for multiple health units.
- Drop-down menus should be used.

Respondents gave the following priorities to specific options for presentation of prevalence data.
Table 2
Respondents’ Opinions of Prevalence Data Presentation Options

<table>
<thead>
<tr>
<th>Priority</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Viewing one indicator for a single health unit across several years e.g. prevalence of asthma in Toronto from 2001-2005</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>2. Viewing one indicator across several health units for a single year e.g. prevalence of asthma in Halton, Toronto and York in 2002</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>3. Viewing several indicators across several health units across several years e.g. prevalence of asthma, diabetes and high blood pressure in Halton, Toronto and York from 2001-2005</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>4. More choice in the format of the results e.g. tables, graphs, charts</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

Missing responses, or “don’t know” are excluded from the table.

There was more interest in being able to compare across years than across health units and/or indicators. For those interested in comparing across health units, they specified that it would be useful only if provided for specific groupings of health units (neighbours, peers or good comparators).

4.3.6 What improvements should be made to the content of the website?

Telephone Interview of RRFSS Members

Respondents assigned the following priorities to specific potential additions to the website.

Table 3
Respondents’ Views about Potential Additions to Website

<table>
<thead>
<tr>
<th>Priority</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>The ability to search the contents of reference documents, including RRFSS questionnaires and data dictionaries, by keyword.</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Meeting minutes</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Common syntax files</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Analysis resources (macros, auto CI program).</td>
<td>27</td>
<td>3</td>
</tr>
</tbody>
</table>

There was clear support for the latter three items to be included in the website. Without prompting, four respondents assigned very high priority to the inclusion of syntax files and three for analysis resources.
There was less support for a search function, perhaps reflecting respondents’ different preferences in terms of website use. Some users are “search dominant,” turning to a search function upon arrival at a website when they have a specific task in mind. Others prefer to navigate the website first, and to use a search function only in the event that they cannot find what they want. This was reflected in comments by usability test subjects.

“`A search function would be helpful, although I would tend to navigate the website first to find what I was looking for before using the search function.”`  
*Usability test respondent*

Throughout the questionnaire, respondents commented on potential additions to the website. Among the most popularly mentioned items were additions to the members-only area.

The most common responses to the question of whether there was anything not currently available on the RRFSS website that they would like to see added to it were:

- bulletin board/forum/chat area/listserv.
- search function.
- reports using RRFSS data.

Mentioned once each were: syntax; downloadable data; Qmaps; CATI questionnaires; minutes; summary of changes to modules and questions; map of health unit boundaries; administrative forms; analysis resources; info on RRFSS validity and reliability; query system; downloadable high-resolution logo; and Ontario comparators.

**4.3.7 What improvements should be made to the format/appearance of the website?**

*Telephone Interview of RRFSS Members*

Respondents’ comments about the format and appearance of the website were generally positive.

Among suggestions for improvement, the most common referred to font colour. Several individuals commented that the red font was difficult to read, and one noted that its presence was confusing as the use of red font is associated with urgency.

Several individuals also commented on issues related to hyperlinks. Some felt the need for a clearer indication of their place on the website. They observed that it would be helpful if hyperlinks that had already been visited would change colour according to typical website standards. Others found hyperlinks on the site
confusing, sometimes being unsure whether or not bolded text was a hyperlink, and having difficulty determining the clickable area of a given hyperlink.

4.3.8 What improvements should be made to the navigation structure and organization of the website?

As described above, usability testing provided valuable information on how to organize material on the website to be more logical and easily accessible to users. In addition, comments received from RRFSS members during telephone interviews also gave insight into the placement of material in the public area of the website versus the members-only area. The card-sorting activity provided further information about how material on the website should be organized.

**Card Sorting**

Each of the RRFSS Representatives who took part in the card sorting exercise demonstrated a different approach to grouping the various topics. However, certain common themes did emerge. A spreadsheet analysis of card sorting results is found in Appendix H, along with an explanation of how to interpret results. In summary:

- There was broad agreement that general information about RRFSS be grouped together, either in an *About RRFSS*-type section or an *FAQ*-type section.
- There was also general support for an *Analysis Tools*-type section, to include data analysis instructions and tools.
- There was disagreement about whether to include contact information in the *About RRFSS* section, or in a separate *Contact Information* section, and whether the lists of RRFSS members and RRFSS-participating health units by year should be included in the public area of the website or restricted to a members-only area.
- There was no clear consensus on the placement of the following topics: related links, MOO, Reports, Workshop Presentations, the yearly timeline for the RRFSS survey, and reference information as to who can use the questionnaires and data posted on the website.

4.3.9 Reaction to Statements about the RRFSS Website

Chart 2 summarizes the extent to which telephone interview respondents agreed or disagreed with the following series of statements about the RRFSS website:

- The RRFSS website (layout, colours, and font) is easy to read.
- Information on the RRFSS website can be located easily.
- The RRFSS website provides high-quality information.
- The prevalence data section on the RRFSS website is useful.
Information on the RRFSS website is up-to-date.

Chart 2
Interview Respondents’ Views of Statements about the RRFSS Website

4.4 Members’ Area

4.4.1 Who should have access to the members-only section of the website, and what should it contain?

Telephone Interview of RRFSS Members

Just over half of questionnaire respondents (16 of 30 respondents) had previously visited the members-only area of the website, while the remainder had not.

Table 4 summarizes respondents’ preferences regarding the location of specific material.
Table 4
Respondents’ Views of Items in the Members Area

<table>
<thead>
<tr>
<th></th>
<th>Members Only</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating health units list</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>RRFSS module inventory</td>
<td>20</td>
<td>9</td>
</tr>
<tr>
<td>Manual of operations (MOO)</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Schedule of official group meeting dates</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>Wave list</td>
<td>23</td>
<td>6</td>
</tr>
</tbody>
</table>

Missing responses, or “don’t know” are excluded from the table.

Of those respondents who favoured more material being available in the public area of the website, four expressed the view that any information that is not confidential in nature should be available publicly, while two suggested that more information should be made available to those outside the RRFSS partnership in order to promote involvement in RRFSS.

In general, those who felt that a particular item belonged in a members-only area argued that the material was technical or specialized in nature, would not be of use or interest to general visitors, and might in some cases be confusing to visitors without specialized knowledge.

When asked for items that they would like to see made available in the members-only section, the most common responses included:

- syntax (15)
- minutes/agendas (12)
- bulletin board/forum/listserv (9)
- datasets for downloading (7)
- Qmaps (6).

Other responses included:

- updated detailed contact list
- CATI questionnaire
- reports/presentations prepared using RRFSS data
- orientation manual
- core modules selection list
- ISR technical documentation
- administrative/planning documents
- technical/methodological documents
- list of external data requests
- analysis guidelines
- data request protocol
- calendar of important dates.
4.5 Website Purpose and Target Users

4.5.1 What should be included in the website Statement of Purpose?

Telephone Interview of RRFSS Members

Table 5 presents a summary of respondents’ opinions of each of the four points presented in a draft statement of purpose.

<table>
<thead>
<tr>
<th>Statement of Purpose</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The RRFSS website will provide RRFSS Representatives with easy access to the information they need to use RRFSS for program planning in their health units.</td>
<td>24</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The RRFSS website will provide news and information about RRFSS in a timely manner.</td>
<td>17</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>The RRFSS website will foster knowledge exchange by publicly disseminating information about the nature, content and benefits of RRFSS.</td>
<td>8</td>
<td>19</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>The RRFSS website will disseminate surveillance data.</td>
<td>13</td>
<td>13</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

Missing responses, or “don’t know” are excluded from the table

Four-fifths of respondents strongly agreed with the first statement, while the remainder agreed. Two useful clarifying suggestions were offered: one respondent observed that the website is not intended to provide all information required by RRFSS Representatives and that the wording should reflect this, while a second respondent suggested that the phrase “program planning” be expanded to “program planning and evaluation.”

While over 80% of respondents either agreed or strongly agreed with the second statements, comments suggested that the phrase “news and information” was too vague and that the statement should identify the target audience.

Ninety percent of respondents expressed agreement or strong agreement with the third statement, but it generated a large number of comments, several reflecting the view that it contained “too many buzzwords.” Specific criticisms included the view that the phrase “knowledge exchange” was used incorrectly and the phrase “publicly disseminating” was imprecise.
Although 87% of respondents were in agreement or strong agreement with the fourth statement, several respondents expressed concern that the phrase “disseminate surveillance data” implied frequent updating, while the core prevalence data are in fact updated only annually.

The most common pattern of general comments about the website Statement of Purpose reflected respondent opinions about the website target audience. While most respondents expressed the view that the website should be primarily focused on the needs of RRFSS Representatives, some believed the scope should be broader, encompassing other health unit staff, including those at non-RRFSS-participating health units considering joining RRFSS. Comments from four respondents pointed to a need to clarify the Statement of Purpose to more clearly identify the target audience.

Respondents’ comments on the Statement of Purpose also reflected their views about desired website content. Six thought that the website should be described as a means to facilitate communication and exchange of information between RRFSS members, four expressed the opinion that the Statement should make explicit reference to the website as a source of documents and resources that assist the internal administration of RRFSS, and three thought explicit reference should be made to the website’s role in the orientation and training of new RRFSS analysts.

4.5.2 Who are the website’s target users?

Telephone Interview of RRFSS Members

Target user groups identified by respondents were RRFSS members (30); Other health unit staff (28); External agencies such as the Social Planning Council, Cancer Care Ontario, the Institute for Clinical Evaluative Sciences, the Heart and Stroke Foundation, Local Health Integration Networks (12); the general public (12); government (10) and academics and students (6). Other responses were nonprofit organizations and the CDC/BRFSS.

“The RRFSS website should include examples of how RRFSS is used to show how it impacts policy and programs.”

“The RRFSS website is a tool to help in the administration of RRFSS and a place where RRFSS Reps and analysts can network and communicate with one another.”

“The RRFSS website should be a resource for new RRFSS Reps/Analysts to become oriented to RRFSS and learn how to properly analyze the data.”

Telephone interviewees
Because of the open-ended nature of the question, it is difficult to quantify and/or categorize the responses. However, in general, all respondents agreed that RRFSS Representatives are the website’s highest priority audience. Two thirds also agreed that other health unit staff form an important target audience. Few thought that any other user groups should be specifically targeted, although some expressed the opinion that they would like to see some information on the website targeted to the needs of others, such as Ministry of Health staff, public health researchers and members of the public, including individuals called to participate in the RRFSS survey.

“There is too much focus on outside stakeholders…. The website should meet the needs of members first.”

*Telephone interviewee*
5. WEBSITE IMPROVEMENTS

Based upon evaluation results and a research on website best practices, recommendations were made to improve the RRFSS website. Short-term improvements, those judged feasible given the project budget and timelines, were implemented on March 7-9, 2008, and feedback on these changes was sought from RRFSS regional groups on March 11-13. Recommendations for long-term improvements, requiring additional time and resources, are presented in section 6.

5.1 Recommendations for Short-term Improvements

Table 6 details recommendations for short-term improvements to the RRFSS website.

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigation structure</td>
<td>The navigation structure is intended to be simple and straightforward, and is primarily directed at the needs of RRFSS members, currently the most frequent users of the website and identified by members as the primary target users. This simplified structure also provides a basis for future changes to the website to meet the needs of an expanding audience.</td>
</tr>
<tr>
<td>Navigation bar</td>
<td>Links to all sections will be accessible using the navigation bar.</td>
</tr>
<tr>
<td>RRFSS logo</td>
<td>A strong web design standard.</td>
</tr>
<tr>
<td>Link-rich home page</td>
<td>Will give new or infrequent website users an overview of the website’s contents, and the ability to access specific desired information directly from the home page.</td>
</tr>
</tbody>
</table>

Table 6

Recommendations for Short-term Improvements
### Orienting the user

| Clear feedback on the user’s current location | Will minimize confusion about user’s location on the website and make it easier to accomplish tasks efficiently and locate desired information. |
| The current page should be highlighted on navigation bar; the ‘breadcrumb’ list should be presented consistently and distinguished clearly from anchor links; visited hyperlinks should change colour. |
| Link to site map from every page | Will provides an alternative way for a user to view contents of website. |
| A dynamically-generated site map should be accessible from every web page |

### Making links clearly identifiable, easy to use and scan

| Give links a distinct look that tells the user that they are clickable | Will reduce annoyance that comes from the need to “minesweep” to determine what is clickable on a page, saving users time and aggravation. |
| Links should be the only page elements in bolded red text; misleading “button-like” icons in the navigation bar should be removed; link lists should be shortened and made easier to scan; anchor links should be used on long pages |

### Giving users more choices

| Search Function | Convenient for “search dominant” users who prefer searching to navigating, and convenient for any user who has trouble finding what he/she is looking for. |
| A search function should be provided, accessible from every web page |

| Adjustable font size | Will make the website more accessible for those with vision issues or small monitors. |
| Users should be provided with font size options. |

### Adding useful content

| Minutes | Convenient reference for RRFSS members; eliminates need for them to save own copies of minutes. |
| The minutes of RRFSS group meetings should be available in the members area |

| Forms | Quick option for those seeking forms. |
| Commonly-used forms should be posted in a printable format |

### Basic updates

| Content updates | Gives users the latest information and makes the website a more valuable resource. |
| Outdated content should be brought up-to-date |
Recommendations presented in Table 6 for short-term improvements include a recommendation to revise the website navigation structure. Table 7 provides information about the contents of each section and brief explanatory comments.

**Table 7**

**Website Section Contents and Comments**

<table>
<thead>
<tr>
<th>Section</th>
<th>Contents</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Page</td>
<td>Brief description of RRFSS, and links to content</td>
<td>Index page to direct infrequent users to material they need, and to indicate to new users whether the website contains info they seek.</td>
</tr>
<tr>
<td>About RRFSS</td>
<td>RRFSS's purpose, history, funding, participants</td>
<td>General information about RRFSS.</td>
</tr>
<tr>
<td>RRFSS Survey</td>
<td>A ‘landing page’ for survey prevalence data, with brief description of survey results and how they are organized</td>
<td>A separate sub-section devoted to the RRFSS survey itself will allow for a more detailed introduction to survey data, methods and documentation than could be presented on the home page.</td>
</tr>
<tr>
<td>Using Survey Results</td>
<td>Description of contents of the section and how to use, interpret and reference it, along with caveats.</td>
<td>Of particular use to new site users, especially health unit staff</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>Links to questionnaires</td>
<td></td>
</tr>
<tr>
<td>Data Dictionaries</td>
<td>Links to data dictionaries</td>
<td></td>
</tr>
<tr>
<td>Query System</td>
<td>RRFSS query system</td>
<td></td>
</tr>
<tr>
<td>Reports &amp; Presentations</td>
<td>RRFSS Reports and workshop presentations, perhaps including locally-produced reports that use RRFSS data or links to such reports</td>
<td>A list all reports and presentations together on one page will simplify the task for users who wish to find a report or presentation on a specific topic.</td>
</tr>
<tr>
<td>Forms &amp; Technical Documents</td>
<td>Forms and technical documents not restricted to RRFSS partners</td>
<td>Technical information not restricted to members, including the RRFSS inventory and wave list, and forms needed by non-members, such as those needed to join the RRFSS partnership or to make data requests.</td>
</tr>
<tr>
<td>FAQ</td>
<td>One list of FAQs, divided into sections</td>
<td>A single list will allow users to scan for a specific topic when they are unsure into which category the topic fits.</td>
</tr>
<tr>
<td>Members</td>
<td>A login page for the members’ area.</td>
<td>Brief explanation of who can access the members’ area, and whom to contact about a lost username or password. Once a member logs on, he/she will see an index page with contents of the members’ area. The members’ area will contain analysis tools, administrative documents, forms, and meeting minutes.</td>
</tr>
</tbody>
</table>
5.2 Regional Group Feedback

Following enhancements made to the RRFSS website in February 2008, the Project Manager participated in conference calls of three of the four RRFSS Regional Groups, scheduled in March 2008, to collect feedback about the enhanced website from Group members.

Feedback was generally positive, with specific positive comments about the font size change option, the site map and the overall “look” and layout of the website. Three small “bugs” were identified, and referred to the website support service. Other issues raised, including the relevance of search engine results and desire for additional content, are addressed in Section 6.4 below.

6. WEBSITE RECOMMENDATIONS

6.1 Policies

6.1.1 Statement of Purpose

It is recommended that the RRFSS partnership approve a website Statement of Purpose, to serve as a guide in future development of the website.

The Advisory Group created a draft Statement of Purpose, and RRFSS partners were asked for comments on the draft during the telephone questionnaire interview. Based upon their comments and suggestions, the following Statement of Purpose is proposed for adoption by the RRFSS partnership.

The RRFSS website:

- gives RRFSS members easy access to up-to-date resources and information to help them use RRFSS for program planning and evaluation in their health units; and
- provides all website visitors with timely information about the nature, content, and benefits of RRFSS.

“Call it a Mission Statement, or call it a Statement of Purpose. Either way, it should be a clear list of a few bullet points about your website, designed to focus your organizational resources on the purpose of the site.

[It] can help you plan future enhancements to your site. Without a Mission Statement, you have no way to prioritize internal requests to add content or functionality to the site.

[It] is especially helpful if you have... responsibility for maintaining the website and you need to ensure that you’re on the right track.”

Jonathan Lehrer, 2003

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The following points are proposed for addition to the Statement of Purpose following future improvements to the RRFSS website.

The RRFSS website:

- serves as a resource for new RRFSS data analysts to become oriented to RRFSS and to learn how to properly analyze RRFSS data and interpret results; and
- is a place where users of RRFSS data can network, communicate, and share with one another.

6.1.2 Security and Privacy Policies

As the RRFSS website evolves, it is recommended that the RRFSS Steering Committee consider adoption of website security and privacy policies. Such policies should be developed in consultation with RRFSS participants, ISR, and website funders, if applicable.

Details of such policies will depend on the nature of future changes to the RRFSS website, General policy examples are provided below.

**Security Policy Example**

Security measures have been integrated into the design, implementation, and ongoing practices of the RRFSS website. For sensitive information, authorized users connect to the RRFSS website via a secure network protocol (SSL), and user information is transmitted through secure lines (encrypted data) to a central database. This database may retain, if provided, personal information that could potentially be used to identify individual users, such as their computer’s IP address.

The RRFSS website is monitored to ensure proper operation, to verify the functioning of applicable security features, and for comparable purposes. Anyone using this system expressly consents to such monitoring.

Unauthorized attempts to modify any information stored on this system, to defeat or circumvent security features, or to use this system for other than its intended purposes are prohibited and may result in criminal prosecution.

**Privacy Policy Example**

RRFSS may automatically collect and store the following information about visitors to the RRFSS website:
the Internet Protocol (IP) address and domain name used. The IP address is a numerical identifier assigned either to your Internet Service Provider or directly to your computer,

- the type of browser and operating system you used and your connection speed,
- the date and time you visited this site,
- the web pages or services you accessed at this site, and
- the website you visited prior to coming to this website.

The information we collect or store is used to improve the content of our website and to help us understand how our website is being used. Additionally, the data we collect helps us identify viruses and attacks against our site.

In the event of a conflict between this privacy policy and any applicable law governing the disclosure or protection of information, the governing law will dictate the action to be taken by RRFSS.

6.1.3 Other Policies

With respect to the RRFSS website, RRFSS may also wish to consider policies on acceptable use, accessibility, copyright, external links and/or disclaimers.

6.2 Procedures

6.2.1 Procedures for making changes to the website

It is recommended that the RRFSS Steering Committee formulate and adopt a series of procedures for making changes to the RRFSS website. Such procedures might include:

- a list of regular updates and frequency e.g. updating RRFSS questionnaires and data dictionaries within one month of becoming available,
- a process by which RRFSS members and other website users can report outdated or incorrect content or technical “bugs,” and
- a process in which website policies, content and navigation structure are regularly reviewed, and changes recommended, approved and implemented. Such reviews might occur on a regular schedule, as part of the RRFSS strategic planning process, or ad hoc in response to significant changes in web design best practices or technology.

6.2.2 Procedures for sharing data with consultants

This project contracted the services of a consultant to develop the prevalence data query system. The experience pointed out the need for data sharing policies
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

and procedures with regard to contractors who are required to work with the RRFSS dataset.

6.3 Maintenance Considerations

Table 8
Website Maintenance Recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enhance timeliness</strong></td>
<td>These changes can be made by the webmaster using the content management system (CMS).</td>
</tr>
<tr>
<td>Update the following areas of the website on a regular schedule:</td>
<td></td>
</tr>
<tr>
<td>• contact information,</td>
<td></td>
</tr>
<tr>
<td>• RRFSS participants,</td>
<td></td>
</tr>
<tr>
<td>• information about upcoming workshops,</td>
<td></td>
</tr>
<tr>
<td>• meeting minutes,</td>
<td></td>
</tr>
<tr>
<td>• questionnaires, data dictionaries and modules, and</td>
<td></td>
</tr>
<tr>
<td>• reports, forms and technical documents.</td>
<td></td>
</tr>
<tr>
<td>Update the scrolling area on the home page with news as required.</td>
<td></td>
</tr>
<tr>
<td><strong>Standardize document format</strong></td>
<td>PDF conversion software such as Adobe Acrobat or ScanSoft would be required. Documents can be posted using CMS.</td>
</tr>
<tr>
<td>Post all new documents (memoranda, administrative documents, minutes) in pdf format so that they are searchable by the site search engine.</td>
<td></td>
</tr>
<tr>
<td><strong>Respond promptly to feedback</strong></td>
<td>Time needed depends upon the volume of feedback received and the nature of that feedback.</td>
</tr>
<tr>
<td>Monitor website-related feedback and respond to any comments, questions or concerns within a week.</td>
<td></td>
</tr>
<tr>
<td><strong>Fight “linkrot” and “bugs”</strong></td>
<td>External links can be corrected by the webmaster using CMS.</td>
</tr>
<tr>
<td>Verify regularly that external links are valid, and update them each month.</td>
<td>Some problems can be corrected using CMS; others have to be done by website technical support.</td>
</tr>
<tr>
<td>Check for “bugs” (e.g. internal links that do not work) each month, and correct them using CMS or contact the web hosting service to correct them.</td>
<td></td>
</tr>
</tbody>
</table>
6.4 Webmaster Description of Duties

The importance of maintenance of the RRFSS website was recognized throughout the evaluation. Some maintenance is currently provided by the RRFSS coordinator. The current recommendations require enhanced maintenance, which might be provided by a webmaster hired specifically for RRFSS or through a contract. In this document, the “webmaster” refers to the person providing enhanced maintenance.

Webmaster duties to maintain the current RRFSS website comprise the following:

WEEKLY
• check for “bugs” and ensure they are dealt with
• respond to user comments and questions

MONTHLY
• solicit updated documents, convert to pdf, and post on website
• maintain and update website content

ANNUALLY
• review technology and security requirements and make recommendations for changes
• participate in RRFSS planning
• review web hosting and support services contract
• maintain and update prevalence data query system
• obtain and analyze user feedback and formulate recommendations to improve the website
• make recommendations to update the website to reflect changes in website design, usability and technology best practices

AS NEEDED
• seek new sources of funding
• keep abreast of developments and obtain, as required, education and training regarding website design, website usability, evaluation methods and tools, and technology.
### 6.5 Recommendations for Long-Term Improvements

**Table 9**  
Improvement Recommendations, Rationale, and Resource Considerations

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Rationale</th>
<th>Res. Considerations</th>
</tr>
</thead>
</table>
| Make website a central source of information for RRFSS members | In telephone interviews, RRFSS representatives indicated that they would like to access the following on the website:  
- Qmaps,  
- CATI questionnaire,  
- ISR technical documentation,  
- RRFSS analyst orientation guide (once complete), and  
- additional analysis tools. | Once permission for website posting has been obtained, the documents would have to be collected, converted to pdf, and posted.  
*Webmaster: 4-6 hours* |
| Add content.                            |                                                                                                                                           |                                                                                     |
| Develop, post, and update an online calendar.  
Allow members to post items to the calendar. | An online calendar would act as a source of administrative information about deadlines, meetings and conferences. Members could add events relevant to other members. | A calendar application would have to be developed, and ongoing technical support provided.  
The webmaster would need to update the calendar as required and monitor postings from RRFSS members. |
| Develop, institute and moderate a forum for RRFSS members.  
Enable old entries to be archived and searchable by keyword. | A forum would give members a place to interact with one another and help foster a sense of community.  
Members would be able to post questions and answers and share analysis tips.  
The forum and archive would be of particular benefit to new RRFSS analysts. | A forum application would have to be developed, and ongoing technical support provided.  
The webmaster would have to monitor postings from RRFSS members.  
*Application development: dependent upon format and features*  
*Webmaster: 1-8 hours/month, dependent on forum use* |
| Allow authorized users to download RRFSS data from the website. | Several RRFSS Representatives are not able to download the RRFSS dataset directly from ISR due to technical barriers. They expressed an interest in being able to download it from the RRFSS website. | This may not be feasible due to data security considerations, and the possibility would have to be explored in discussions with ISR.  
*Resource implications: require further investigation, depend upon cost and complexity of administering additional security features.* |

| Make website more useful to a wider range of users |  | Needs of target user groups would have to be assessed and appropriate material developed in consultation with RRFSS members. Material would have to be drafted and reviewed for accuracy, and decisions would have to be made as to how to organize and present this material on the website.  
*Resource implications: require further consideration; project funding might be required* |

| Create new content to meet the needs of target user groups. | This will help to answer the questions of website users who do not have specialized technical knowledge e.g. provide simplified versions of some technical documents.  
RRFSS Representatives may be able to save time by directing other health unit staff to this material for specific information. |  |

| Provide related links. The links should be annotated, and regularly updated. | This will assist website users to find other material of interest, and may encourage other websites to include links to the RRFSS website. | RRFSS members input will have to be sought about appropriate links. Annotations will have to be prepared and a links page created. Links will have to be verified regularly.  
*Webmaster: preparation of annotations and posting of links: 2-4 hours; verification and correction of links: 1 hour/month* |
<table>
<thead>
<tr>
<th>Improve usability</th>
<th>An application will have to be provided to allow the creation of mouseover windows.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provide additional information about questionnaire and data dictionary modules.</td>
<td>Module content keywords would have to be compiled and posted.</td>
</tr>
</tbody>
</table>
| Module contents should be clearly identified; the module list should include mouseovers briefly describing the contents of each module. | Application development: $500  
Webmaster: compilation and posting of module contents: 8-10 hours |
|                                                                                  | Website contents would have to be reviewed to identify content to provide in a printer-friendly format. |
|                                                                                  | Provision of printer-friendly option: $500-750  
Webmaster: identification of content to be provided in printer-friendly format: 2-3 hours |
| Provide material in a printer-friendly format.                                   | A careful review would have to be made of website contents and search terms to identify appropriate terminology and develop a series of cross-references. Changes would then have to be made to the website. |
|                                                                                  | Resource implications: require further consideration; project funding might be required. This might be carried out as a student summer project. |
| Simplify and clarify wording.                                                   | Files would have to be converted to pdf and posted on the website.                |
| Make labels, headings and terminology simpler and clearer.                      | Webmaster: 6-10 hours                                                            |
| Convert existing documents posted on the website to pdf.                         |                                                                                   |
### Enhance timeliness

| Provide information on data timeliness and quality. | This will enhance the credibility of the RRFSS website, and will assure users that they are accessing the most recent version of the material. For example, include statements such as “This information was updated on xxx,” or “These data are preliminary and in the process of being verified.” | Timeliness and quality statements will have to be posted for existing website content. A process will have to be established to ensure that new content is accompanied by timeliness and quality statements.  

**Webmaster:** Posting statements for existing content: 6-8 hours; including statements for new content: 1-2 hours/month |

| Tell visitors what’s new. Highlight recent changes to the website, and update this section every time changes are made. | Regular users will be able to identify the latest material and determine whether it is relevant to them. Websites gain credibility and increase visitor traffic when users see that it is kept up-to-date and frequently updated with new and useful information. | A place on the home page will have to be created for a “what’s new” section. As content is added to the website, this section will have to be updated.  

**Webmaster:** 1-2 hours/month |

### Enhance credibility of RRFSS

| Collect and post local RRFSS reports and/or links to them. | This will allow analysts to see how their colleagues have used RRFSS data, and will enhance the credibility of RRFSS as a useful source of data to meet local health needs. | Copies of local reports and/or links to them will have to be collected from RRFSS members, permission sought for posting, if required, and material posted on the website. A process will then have to be put in place to obtain and post new material, perhaps every three months.  

**Webmaster:** initial collection and posting: 16-20 hours; collecting and adding new content: 4-6 hours every 3 months |
Solicit “success stories” from RRFSS partners that highlight how RRFSS data have been used to effect policy changes, and include a “success stories” section on the website.

This will illustrate the positive impact of RRFSS, thus encouraging the participation of other health units and supporting requests for additional funding.

“Success stories” will have to be sought from RRFSS members, and a section added to the website on which to post them.

Resource considerations: uncertain, will depend on desired length and detail of section and frequency of updates

### Enhance website security

Enhance security measures for the members’ area. Measures to consider include:
- SSL, a cryptographic protocol that provides secure internet communications,
- assignment of individual login IDs and passwords, with administration of user accounts using CMS,
- assignment of more secure passwords,
- allowing members to login only from authorized IP addresses, and
- PGP system to encrypt all transmissions between server and client

As additional confidential material is added to the members’ area, enhanced security measures may be required.

Security requirements will have to be assessed as changes are made to the RRFSS website. The costs and benefits of security measures will have to be considered, and appropriate measures adopted.

Resource implications: require further consideration
6.6 Practices to Ensure Ongoing Improvements

The following practices are recommended to ensure ongoing improvement of the RRFSS website.

*Include the website in RRFSS planning*

By explicitly incorporating consideration of website users, purpose, content and design in overall RRFSS planning, RRFSS will ensure that the website plays a useful role in administering and disseminating information about RRFSS.

*Seek new sources of funding*

New sources of funding for the website would provide RRFSS with the resources needed to implement recommendations outlined in this report and to identify, plan and implement further improvements.

*Provide continuing education and training for webmaster*

The webmaster should be offered education and training about topics relevant to website administration, design and evaluation.

*Collect and analyze user feedback*

To identify and prioritize future website improvements, it is vital to determine who uses the website, how they are using it and how they would like to see it changed and improved. To do so, evaluations such as online surveys, questionnaires and usability testing should be carried out regularly.

*Update the website to reflect changes in technology, website design and usability best practices*

The RRFSS website should be assessed annually as internet technology and best practices change and evolve, and updated and redesigned to reflect best practices.

*Regularly review web hosting and support services contract*

Contract arrangements with the company providing web hosting and support services should be reviewed regularly to ensure that services are provided at competitive fees.
References

1. Material in section 1 is adapted from the following RRFSS evaluations:

   http://www.simcoemuskokahealth.org/surveys/rrfss/introduction.asp

   http://www.rrfss.on.ca/resources/Final%20Report%20Part%201.pdf

   http://www.rrfss.on.ca/resources/Evaluation%20of%20the%20RRFSS,%20May%202000.pdf


10. ibid


12. Krug, p. 37


List of Abbreviations

BRFSS – Behavioral Risk Factor Surveillance System
CATI – Computer Assisted Telephone Interview
CEHIP – Central East Health Information Partnership
IP – Internet Protocol
ISO – International Standards Organization
ISR – Institute for Social Research
MOH – Medical Officer of Health
MOHLTC – (Ontario) Ministry of Health and Long Term Care
MOO – Manual of Operations
OPHS – Ontario Public Health Standards
PHAC – Public Health Agency of Canada
PHRED – Public Health Research, Education and Development
Qmaps -
RDD – Random Digit Dialing
RRFSS – Rapid Risk Factor Surveillance System
SPSS – Statistical Package for the Social Sciences
SSL – Secure Socket Layer
URL – Universal Resource Locator
WEE – Website Evaluation and Enhancement
Glossary

Accordion Menu
A two-level menu that allows users to first select a category and then select from items within that particular category. As each category is selected, it is expanded to display the list of items specific to that category, while all other categories are collapsed.

Breadcrumbs/Breadcrumb Trail
The part of a web page that shows the website user where he/she is relative to other pages of the website. Breadcrumb trails are often found near the top of Web pages and define both the current location within the site hierarchy as well as primary pages above the current page.

Card Sorting
A technique for uncovering the hierarchical structure in a set of concepts by having users group items written on a set of cards, often used, for instance, to work out the organization of a website.

Clickable
Eliciting a response when clicked, for example a hyperlink that opens a new page.

Content Management System
A (web) content management system allows a number of people to maintain a website using a simple web-browser-based interface, instead of manually authoring web pages.

Cookie
A preference file written to the user’s computer when they access a website. Cookies are commonly used to store account information that can be used when the website is revisited at a later date. For example, if the layout or content of a website can be customized, a cookie can be used to ‘remember’ the user’s preferred background colour or news source. Only the website that created the cookie file can use the information it stores.

Information Architecture
The art and science of organizing and labeling web sites, intranets, online communities and software to support findability and usability.

IP [Internet Protocol]
The method or protocol by which data are sent from one computer to another on the Internet. Each computer (known as a host) on the Internet has at least one IP address that uniquely identifies it from all other computers on the Internet.

ISO (International Organization for Standardization)
An international standard-setting body composed of representatives from various national standards organizations that promulgates world-wide industrial and commercial standards.

Iterative Design
A design methodology based on a cyclic process of prototyping, testing, analyzing, and refining a work in progress.

Link-Rich Home Page
Home pages with a large number of useful links, making the site contents as visible from the home page as possible.

Linkrot (or Link rot)
The process through which links no longer reach their intended destinations, because the linked websites disappear, change their content or are reorganized.

Minesweeping
A user’s response to a web page with insufficient differentiation between active, ‘clickable’ elements (such as navigation), and content. Without appropriate visual cues, the user must skim the cursor around the page to identify active elements.

mouseover
A popular special effect in which text or a web graphic changes colour or appearance when the user places his/her cursor over it. Mouseovers can also be used to trigger navigation changes or pop-up windows.

Navigation
Both the system(s) that a user can employ to move around a website (e.g. breadcrumbs) and the visual appearance of such systems (e.g. hyperlinked text).

PGP (Pretty Good Privacy)
A computer program that provides cryptographic privacy and authentication.

Site Map
Provides an overview of the content of a website in a manner similar to a book’s table of contents. Sections and pages are typically listed according to narrative flow if the pages are intended to be read in a specific order, or alphabetically or chronological index if content pages are essentially unrelated.

SSL (Secure Socket Layer)
A protocol designed by Netscape Communications to enable encrypted, authenticated communications across the Internet.

URL (Uniform Resource Locator)
The unique address for a file that is accessible on the Internet. The URL of the RRFSS website is http://www.rrfss.on.ca.
Usability
A quality attribute that assesses how easy user interfaces are to use. The word "usability" also refers to methods for improving ease-of-use during the design process.

Usability testing
A process in which representative website users are asked to perform representative tasks on a particular website. Test administrators observe what the users do, where they succeed, and where they have difficulties with the user interface, and encourage users to comment on the process.
### Appendix A
**RRFSS-Participating Health Units**

<table>
<thead>
<tr>
<th>RRFSS Partner Health Units in 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brant County Health Unit</td>
</tr>
<tr>
<td>Durham Region Health Department</td>
</tr>
<tr>
<td>Grey Bruce Health Unit</td>
</tr>
<tr>
<td>Haliburton, Kawartha, Pine Ridge District Health Unit</td>
</tr>
<tr>
<td>Halton Region Health Department</td>
</tr>
<tr>
<td>City of Hamilton - Public Health &amp; Community Services</td>
</tr>
<tr>
<td>Hasting &amp; Prince Edward Counties Health Unit</td>
</tr>
<tr>
<td>Huron County Health Unit</td>
</tr>
<tr>
<td>Kingston, Frontenac and Lennox &amp; Addington Health Unit</td>
</tr>
<tr>
<td>Leeds, Grenville and Lanark District Health Unit</td>
</tr>
<tr>
<td>Middlesex-London Health Unit</td>
</tr>
<tr>
<td>Niagara Region Public Health Department</td>
</tr>
<tr>
<td>Ottawa Public Health</td>
</tr>
<tr>
<td>Oxford County – Public Health &amp; Emergency Services</td>
</tr>
<tr>
<td>Peel Public Health</td>
</tr>
<tr>
<td>Simcoe Muskoka District Health Unit</td>
</tr>
<tr>
<td>Sudbury &amp; District Health Unit</td>
</tr>
<tr>
<td>Toronto Public Health</td>
</tr>
<tr>
<td>Region of Waterloo Public Health</td>
</tr>
<tr>
<td>Windsor-Essex County Health Unit</td>
</tr>
<tr>
<td>York Region Public Health Services</td>
</tr>
</tbody>
</table>
Appendix B
RRFSS Website Enhancement Advisory Group Terms of Reference

The RRFSS Website Enhancement Advisory Group is an ad hoc committee that represents the RRFSS Regional Groups, the RRFSS Website Group and the RRFSS Analysis Group in the planning, organization and implementation of the RRFSS Website Enhancement and Evaluation. This group will exist for one year, the duration of the enhancement and evaluation project.

Purpose of the RRFSS Website Enhancement Advisory Group:

The purpose of this group will be to:

- implement the enhancement and evaluation of the RRFSS website based on the proposal entitled "Evaluation of the RRFSS Website: The Role of the RRFSS Website in Enhancing Knowledge Exchange of Surveillance Data", attached as an appendix to these terms of reference;
- expand the aims and objectives of the website enhancement and evaluation, and develop a work plan for carrying out the project; and
- liaise with the RRFSS Steering Group, the RRFSS Regional Groups, the Website Group, the Analysis Group and the PHRED Operations Committee.

Membership

The group will consist of the following voting members:

- at least one RRFSS representative from each of the RRFSS Regional Groups, including representation from the RRFSS Website Group and the RRFSS Analysis Group; and
- at least one PHRED representative;

and the following as non-voting members:

- the RRFSS Coordinator; and
- project staff.

Chair of the RRFSS Website Enhancement Advisory Group

A PHRED representative will act as chair of the RRFSS Website Enhancement Advisory Group.
Responsibility of RRFSS Members

RRFSS members will have the following responsibilities:

- represent RRFSS Regional Groups when making decisions related to the enhancement and evaluation of the RRFSS website;
- communicate with Regional Group Representatives and provide opportunities for input when needed;
- bring the knowledge and expertise of the RRFSS Website Group and Analysis Group to the task of the RRFSS website enhancement and evaluation;
- attend RRFSS Website Enhancement and Evaluation Group meetings;
- provide ongoing advice and consultation to the PHRED program for the one-year enhancement and evaluation period, ensuring continuity with the RRFSS Strategic Plan and the RRFSS Evaluation 2005/06;
- provide guidance on data analysis and the interpretation of results;
- assist in the development of recommendations resulting from the enhancement and evaluation project;
- review drafts of the report and advise on the revisions; and
- make recommendations on the dissemination of the final report.

Responsibility of PHRED Members

PHRED members will have the following responsibilities:

- provide a chair to the RRFSS Website Enhancement Advisory Group;
- assume a leadership role in the implementation and reporting of the RRFSS Website Enhancement and Evaluation project;
- attend RRFSS Website Enhancement Advisory Group meetings; and
- provide feedback to the PHRED Operations Committee.

Responsibilities of the RRFSS Website Enhancement Advisory Group Chair

The RRFSS Website Enhancement Advisory Group chair will have the following responsibilities:

- schedule meetings;
- develop meeting agendas;
- communicate as required with the Public Health Agency of Canada as required by the funding arrangement;
- undertake responsibility for staffing, staff supervision and the budget of the project, as negotiated with the Public Health Agency of Canada; and
- communicate with the chairs of the Steering Group, the Website Group and the Analysis Group on matters requiring input from these groups.
Responsibilities of the RRFSS Coordinator

The RRFSS Coordinator will:
- ensure the distribution of minutes to all RRFSS representatives; and
- attend meetings of the RRFSS Website Enhancement Advisory Group

Responsibilities of Project Staff

Project staff will;
- attend meetings of the RRFSS Website Enhancement Advisory Group;
- take minutes of the meetings of the Group;
- provide updates of their work; and
- answer questions and provide expertise to the RRFSS Website Enhancement Advisory Group.

Frequency of Meetings

The frequency of meetings will be determined by the group.

Quorum

At least 50% of voting members will constitute quorum.

Taking of Minutes

The task of taking minutes will rotate among the RRFSS members until such time as project staff is hired.

Decision Making

All decisions are based on consensus of the RRFSS Website Enhancement Advisory Group. Consensus is reached when all voting members at the meeting approve the discussion of the issues and all members approve or “can live with” the decision.

The Terms of Reference for the RRFSS Enhancement Advisory Group will be reviewed periodically as necessary.

Date of Last Revision: May 28, 2007
Approved by the RRFSS Steering Group
Appendix C
Telephone Interview

Interviewee ____________________ Phone no. ____________________
Position ____________________ Interview date & time ____________________
Health Unit ____________________ Length of interview ____________________

On behalf of the RRFSS Website Enhancement and Evaluation Group, I’d like to thank you for taking the time to help us evaluate the RRFSS website.

We’ve prepared this interview to find out about your experiences with the RRFSS website, your views on its purpose and intended users, and your suggestions for improvement.

Please feel free to refer to the RRFSS website as needed as we proceed with the interview. When we reach the section dealing with the members-only area of the website, I will provide you with the username and password to access it.

You may also find it helpful to have a pen and paper handy, to jot down notes as we proceed.

| We’ll begin with questions that address your experiences with the RRFSS website. |
|---|---|
| 1 | How long have you been involved in RRFSS? ____________________ |
| 2a | Have you ever visited the RRFSS website? Yes _____ No _____ |
|     | If “Yes” skip to 3. If “No,” ask 2b and skip to 9. |
| 2b | What reasons do you have for not visiting the RRFSS website? |
|     | ____________________ |
|     | ____________________ |
|     | ____________________ |
| 3a | On average, how often did you visit the RRFSS website over the course of the last year? |
|     | ○ Have not visited       ____ per month |
|     | ___ per day            ____ per year |
|     | ___ per week           |
|     | If “Have not visited” or < once per month, ask 3b; otherwise skip to 4. |
| 3b | What reasons do you have for not visiting the RRFSS website more often? |
|     | ____________________ |
4 What are you looking for when you visit the RRFSS website?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

5 During your visits to the RRFSS website over the past year, please indicate whether you’ve used the following sections of the RRFSS website often, sometimes, rarely, or never.

Remind the interviewee to refer to the website if needed.

<table>
<thead>
<tr>
<th>Section</th>
<th>Often</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>About RRFSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevalence data</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaires</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data dictionary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Related links</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshops</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members’ area</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 I’m going to read five statements about the RRFSS website. For each of the following statements about the RRFSS website, please indicate whether you strongly agree, agree, disagree, or strongly disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>6a Information on the RRFSS website can be located easily.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If “Disagree” or “Strongly Disagree” ask:

6ai What problems have you experienced in finding information on the website?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
### Information on the RRFSS website is up-to-date.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't know</th>
</tr>
</thead>
</table>

*If “Disagree” or “Strongly Disagree” ask:*

**6bi**  
What concerns do you have about the timeliness of information on the website?

---

### The RRFSS website provides high-quality information.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't know</th>
</tr>
</thead>
</table>

*If “Disagree” or “Strongly Disagree” ask:*

**6ci**  
What concerns do you have about the quality of information on the website?

---

### The RRFSS website (layout, colours, and font) is easy to read.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't know</th>
</tr>
</thead>
</table>

*If “Disagree” or “Strongly Disagree” ask:*

**6di**  
What aspects of the website’s appearance make it difficult to read, and why?

---
6e

The prevalence data section on the RRFSS website is useful.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don't know</th>
</tr>
</thead>
</table>

If “Disagree” or “Strongly Disagree” ask:

6ei

What concerns do you have about the usefulness of the prevalence data section of the website?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Now I have some additional questions about the prevalence data section of the website.

7a
Would you like prevalence data to be presented differently than they’re currently presented on the RRFSS website?

Yes _____ No _____

If “Yes,” ask 7b. If “No,” skip to 7c.

7b
How would you like the prevalence data to be presented?

____________________________________________________________________
____________________________________________________________________

7c
I’m going to read four different options for presentation of prevalence data on the website. Could you please tell me whether you think the option is a high or a low priority?

<table>
<thead>
<tr>
<th>Option</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Viewing one indicator for a single health unit across several years.</td>
<td></td>
</tr>
<tr>
<td>e.g. prevalence of asthma in Toronto from 2001-2005</td>
<td></td>
</tr>
<tr>
<td>ii. Viewing one indicator across several health units for a single year</td>
<td></td>
</tr>
<tr>
<td>e.g. prevalence of asthma in Halton, Toronto and York in 2002</td>
<td></td>
</tr>
<tr>
<td>iii. Viewing several indicators across several health units across</td>
<td></td>
</tr>
<tr>
<td>several years e.g. prevalence of asthma, diabetes and high blood</td>
<td></td>
</tr>
<tr>
<td>pressure in Halton, Toronto and York from 2001-2005</td>
<td></td>
</tr>
<tr>
<td>iv. More choice in the format of the results e.g. tables, graphs, charts</td>
<td></td>
</tr>
</tbody>
</table>
Before we move on to questions about the RRFSS website’s users, role, and “members only” section, we’d like to get a sense of your overall opinion of the RRFSS website.

8 Overall, how satisfied are you with the RRFSS website?
   ○ Very satisfied
   ○ Somewhat satisfied
   ○ Somewhat dissatisfied
   ○ Very dissatisfied
   ○ Don’t know

The next questions ask your opinions about the RRFSS website’s intended users.

9a In your opinion, who are the potential target users of the RRFSS website?

9b For each of the users you identified, how important do you think it is to tailor website content to meet their needs?

<table>
<thead>
<tr>
<th>Group</th>
<th>Importance of tailoring content to meet their needs?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10a Have you ever directed other staff in your health unit to the RRFSS website as a resource for program planning?

Yes ______ No ______

If “Yes,” ask 11b; if “No,” ask 11c.

10b Which sections of the website have you directed them to, and why?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Is there anything that prevents you from directing other staff in your health unit to the
10c RRFSS website?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
___________________________________________________________________

10d Have you ever directed any other individuals or groups to the RRFSS website?

Yes ______  No ______

If “Yes,” ask 11e.

Who are they, which sections of the website have you directed them to, and why?

____________________________________________________________________
____________________________________________________________________
____________________________________________________________________
___________________________________________________________________
**Now we’ll move on to some questions about the purpose of the website.**

**11a** A goal of the website evaluation is to develop a “Statement of Purpose” for the RRFSS website. We’d like your opinion as to whether each of the following four points belongs in the Statement of Purpose. For each point, please indicate whether you strongly agree, agree, disagree or strongly disagree.

<table>
<thead>
<tr>
<th>Point</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. The RRFSS website will provide RRFSS Representatives with easy access to the information they need to use RRFSS for program planning in their health units.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii. The RRFSS website will provide news and information about RRFSS in a timely manner.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii. The RRFSS website will foster knowledge exchange by publicly disseminating information about the nature, content and benefits of RRFSS.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv. The RRFSS website will disseminate surveillance data.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*If “Disagree” or “Strongly Disagree” to any, ask 12b; otherwise skip to 12c.*

**11b** Would you like to make any comments about this point?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

**11c** Do you think anything else should be included in the website statement of purpose?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

**11d** *Record any comments about wording here.*

__________________________________________________________________
__________________________________________________________________
Most information on the RRFSS website can be accessed by anyone visiting the website. A new “members only” area has been added to the website that can be accessed only by visitors with access to a username and password. The next questions ask your views about the “members only” area of the website. If you’d like to refer to it, the username is RRFSS and the password is Fil3s.

12a Referring to the list of items currently available in the “members only” area, do you think that each of these items belongs in the “members only” area, belongs in the public area of the website, or does not belong on the website?

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. Participating health units list</td>
<td></td>
</tr>
<tr>
<td>ii. RRFSS module inventory</td>
<td></td>
</tr>
<tr>
<td>iii. Manual of operations (MOO)</td>
<td></td>
</tr>
<tr>
<td>iv. Schedule of official group meeting dates</td>
<td></td>
</tr>
<tr>
<td>v. Wave list</td>
<td></td>
</tr>
</tbody>
</table>

*If answer “No” to any, ask 12b; otherwise skip to 12c.*

12b Where do you feel that this item belongs, and why?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________

12c Is there anything else that you think should be included in the “members only” section?

__________________________________________________________________
__________________________________________________________________
__________________________________________________________________
This final set of questions asks for your opinions about potential changes and improvements to the RRFSS website to make it more useful to you.

13 Please indicate whether you'd consider the following additions to the RRFSS website to be high-priority or low-priority.

<table>
<thead>
<tr>
<th>Addition</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. The ability to search the contents of reference documents, including RRFSS questionnaires and data dictionaries, by keyword.</td>
<td></td>
</tr>
<tr>
<td>ii. Meeting minutes</td>
<td></td>
</tr>
<tr>
<td>iii. Common syntax files</td>
<td></td>
</tr>
<tr>
<td>iv. Analysis resources (macros, auto CI program).</td>
<td></td>
</tr>
</tbody>
</table>

14 Is there anything not currently available on the RRFSS website that you'd like to see added to it and that you haven't already mentioned?

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

15 Do you have any additional comments about the RRFSS website?

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

Thanks very much for making time in your busy schedule to participate in the website evaluation process. I'll summarize my notes on your responses and send the summary to you by email for your review to ensure that I've recorded your answers accurately. I would appreciate it if you could reply with any changes or corrections within a week after receiving the summary.

If you have any questions or comments about the evaluation process, please feel free to contact Dr. Kate O'Connor, the Chair of the RRFSS Website Enhancement and Evaluation Group.
Appendix D
Emails to Telephone Interviewees

Introductory Email

Dear ---

As you know, RRFSS has received funding from the Public Health Agency of Canada to evaluate and make improvements to the RRFSS website. As part of the evaluation process, the RRFSS Website Enhancement and Evaluation Group has developed a questionnaire to be administered to RRFSS partners. Your input will be valuable to us in improving the website in ways that make it more useful for you.

I will be administering the questionnaire by telephone in October, and would like to set up a one-hour appointment with you during the period Oct. 9 to Oct. 31. Please let me know a couple of convenient dates and times during that period, and I’ll do my best to schedule you in at your preferred date and time.

Thanks very much for your assistance with this project. If you have any questions, please don’t hesitate to give me a call or send me an email.

Regards,

Nancy Churchman, Project Manager

Appointment Information Email

Dear ---

I am emailing with some information about our upcoming RRFSS website evaluation telephone interview.

Our telephone interview, scheduled for ---, will take approximately 45 minutes. I will call you at your number at ---. If this number is incorrect, please let me know.

It would be helpful if you have the RRFSS website (www.rrfss.on.ca) open on your computer to refer to as we proceed with the interview. You may also wish to have a pen and paper handy to make some notes as we proceed.

The interview will consist of a series of questions on the following topics:

- Some general questions about your involvement with RRFSS and your visits to the RRFSS website in the past year
- Your opinion of the following statements about the RRFSS website:
  - Information on the RRFSS website can be located easily.
Information on the RRFSS website is up-to-date.
- The RRFSS website provides high-quality information.
- The RRFSS website (layout, colours, and font) is easy to read.
- The prevalence data section on the RRFSS website is useful.

- Your ideas and suggestions as to how you would like to see the prevalence data presented on the website in future
- Who you feel are the RRFSS website’s intended users and your experiences, if any, in directing other users to the website
- Your reaction to the following proposed components of a statement of purpose for the RRFSS website:
  - The RRFSS website will provide RRFSS Representatives with easy access to the information they need to use RRFSS for program planning in their health units.
  - The RRFSS website will provide news and information about RRFSS in a timely manner.
  - The RRFSS website will foster knowledge exchange by publicly disseminating information about the nature, content and benefits of RRFSS.
  - The RRFSS website will disseminate surveillance data.
- Your views on current and future content of the "members only" area
- Your opinion of potential additions to the RRFSS website

You will also be given an opportunity to express your opinions and make suggestions about any other issues related to the RRFSS website that you consider important.

If you have any questions, please don't hesitate to contact me; otherwise, I'll look forward to speaking to you on ---.

Regards,

Nancy Churchman, Project Manager

**Interview Summary Email**

**Dear ---**

Thanks again for helping us with the RRFSS website evaluation.

I’ve attached a summary of our telephone conversation. Please let me know if I’ve recorded your comments completely and accurately.

Also, if you have any additional comments on any of the questions, please feel free to let me know and I'll add them to the summary. If possible, I would appreciate receiving your comments by ---.
Appendix E
Online Survey Text and Screen Captures

We are working to improve our website, and would like your help. We would appreciate if you could take a few minutes to complete a brief survey before you enter the RRFSS website.

Proceed to survey
Ask me next time I visit

<table>
<thead>
<tr>
<th>1</th>
<th>I am visiting the RRFSS website today</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>for work-related reasons</td>
</tr>
<tr>
<td>1a1</td>
<td>I work for an Ontario Public Health Unit</td>
</tr>
<tr>
<td>1a1a</td>
<td>I work for a health unit that is currently a RRFSS partner</td>
</tr>
<tr>
<td>1a1a1</td>
<td>I am a RRFSS Representative or Alternate (Yes/No)</td>
</tr>
<tr>
<td>1a1b</td>
<td>I work for a health unit that is not currently a RRFSS partner</td>
</tr>
<tr>
<td>1a2</td>
<td>I work for another organization</td>
</tr>
<tr>
<td>1a2a</td>
<td>What organization do you work for? (open ended)</td>
</tr>
<tr>
<td>1b</td>
<td>as a student or educator</td>
</tr>
<tr>
<td>1c</td>
<td>for other reasons</td>
</tr>
</tbody>
</table>

| 2 | What are you looking for on your visit to the RRFSS website today? (open ended) |

<table>
<thead>
<tr>
<th>3</th>
<th>Have you visited the RRFSS website before?</th>
</tr>
</thead>
<tbody>
<tr>
<td>3a</td>
<td>Yes</td>
</tr>
<tr>
<td>3a1</td>
<td>On your last visit to the RRFSS website, were you able to find what you were looking for? (Yes/No)</td>
</tr>
<tr>
<td>3a2</td>
<td>Overall, how satisfied are you with the RRFSS website? (Very satisfied, somewhat satisfied, somewhat dissatisfied, very dissatisfied)</td>
</tr>
</tbody>
</table>

| 3b | No, this is my first visit |

| 4 | Do you have any other comments about the RRFSS website? (open ended) |

Submit button followed by “thank you” statement: Thank you for your feedback!
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

1. I am visiting the RRFSS website today:
   - For work-related reasons
   - as a student or educator
   - For other reasons

2. What are you looking for on your visit to the RRFSS website today?

3. Have you visited the RRFSS website before?
   - Yes
   - No, this is my first visit

4. Do you have any other comments about the RRFSS website?

Ontario Coordinator,
Rapid Risk Factor Surveillance System
Halton Region Health Department
1151 Bronte Road, Oakville ON L6M 3L1
Phone: (905) 825-6000 Ext 7581
Fax (905) 825-8588
E-mail: Lynne.Russell@halton.ca
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

1. I am visiting the RRFSS website today:
   - For work-related reasons
   - I work for an Ontario Public Health Unit
   - I work for a health unit that is currently a RRFSS partner
   - I am a RRFSS Representative or Alternate
   - I work for another organization
   - as a student or educator
   - for other reasons

2. What are you looking for on your visit to the RRFSS website today?

3. Have you visited the RRFSS website before?
   - Yes
   - No, this is my first visit

4. Do you have any other comments about the RRFSS website?

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RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

1. I am visiting the RRFSS website today:
   - For work-related reasons
   - as a student or educator
   - For other reasons

2. What are you looking for on your visit to the RRFSS website today?

3. Have you visited the RRFSS website before?
   - Yes
     - On your last visit to the RRFSS website, were you able to find what you were looking for? Select [ ]
     - Overall, how satisfied are you with the RRFSS website? Select [ ]
   - No, this is my first visit

4. Do you have any other comments about the RRFSS website?

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RRFSS
Rapid Risk Factor Surveillance System

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RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project
Appendix F
Usability Tests

Usability Test A – RRFSS Representatives

Guidelines

• You may find it helpful to have a pen and paper handy to jot down notes as we proceed.
• You will be asked to perform five tasks using the RRFSS website. Please start each task from the RRFSS home page. Take your time, and don’t feel that you have to hurry. As you go along, please indicate the links that you click. Also, please describe your thought processes out loud.
• I cannot assist you with the tasks. Don’t worry if you don’t succeed at a task – that signals a problem with the design of the website, and not with you.
• You’ll get a chance to summarize your experience after each task and at the end of the session.
• Feel free to ask any general questions before we begin.

Tasks

1. You need to find out the exact wording of the RRFSS survey question asking how many cigarettes the respondent smokes.

2. You need to find out the month and year in which questions about postpartum depression were first included in the RRFSS questionnaire.

3. You need to find out whether RRFSS respondents from Sri Lanka are given the choice to identify themselves as Tamil or only as Sri Lankan.

4. You need to find the percentage of adults in Kingston who received a flu shot in 2002 and in 2006.

5. You need to find out how to cite the online RRFSS questionnaire in published material.
Usability Test B- Health Unit Program Staff

Guidelines

- You may find it helpful to have a pen and paper handy to jot down notes as we proceed.
- You will be asked to perform four tasks using the RRFSS website. Please start each task from the RRFSS home page. Take your time, and don’t feel that you have to hurry. As you go along, please indicate the links that you click. Also, please describe your thought processes out loud.
- I cannot assist you with the tasks. Don’t worry if you don’t succeed at a task – that signals a problem with the design of the website, and not with you.
- You’ll get a chance to summarize your experience after each task and at the end of the session.
- Feel free to ask any general questions before we begin.

Tasks

1. You need to find the name and email address of the RRFSS contact at the health unit in the Niagara region.

2. You need to find out how the RRFSS survey asks respondents about whether they allow smoking in their vehicle.

3. You need to find out whether the percentage of adults in Kingston getting a flu shot was similar to the percentage in Ottawa in 2002.

4. What would be a typical task that you would do at the RRFSS website? Try it.
Usability Test C – Epidemiologists/Researchers from Non-RRFSS-Participating Health Units

Guidelines

- You may find it helpful to have a pen and paper handy to jot down notes as we proceed.
- You will be asked to perform four tasks using the RRFSS website. Please start each task from the RRFSS home page. Take your time, and don’t feel that you have to hurry. As you go along, please indicate the links that you click. Also, please describe your thought processes out loud.
- I cannot assist you with the tasks. Don’t worry if you don’t succeed at a task – that signals a problem with the design of the website, and not with you.
- You’ll get a chance to summarize your experience after each task and at the end of the session.
- Feel free to ask any general questions before we begin.

Tasks

1. You need to find the exact wording of the RRFSS survey question asking how many cigarettes the respondent smokes.

2. You need to find a copy of a presentation by Michael Spinks on the Ontario Cancer Risk Factor Surveillance System at a RRFSS Workshop.

3. Your health unit is considering joining the RRFSS partnership and you need to find out how long it takes for health units to receive RRFSS data once a survey is completed.

4. You need to find out the percentage of adults in Kingston, Ottawa and Toronto who received a flu shot in 2003.
Appendix G
Card Sorting Instructions

Thanks for helping us to evaluate and improve the RRFSS website by taking part in this card sorting activity. The activity should take approximately 20 minutes to complete.

ABOUT THE ENCLOSED CARDS

The enclosed cards represent groupings of information currently on the RRFSS website or information that could be on the RRFSS website in future.

SORT INTO PILES

Please look at the card topics and sort the cards into piles that make sense to you.

The piles you create will represent content that you feel fits together. For example, you may decide that 6 card topics are similar. By putting those 6 cards in a pile together, you are indicating that the topics on those cards should be available from a common link on the RRFSS website.

We are looking for between 6 to 8 groupings. Try to put your cards into no fewer than 6 and no more than 8 piles. This is the target number of groups, but if you end up with slightly fewer than 6 or more than 8, that is also acceptable.

It does not matter how many cards you have in each pile. You may have one pile with 20 cards and another with only 3. There is no minimum or maximum number of cards per pile.

Try not to think about the current organization of the RRFSS website. We want to redesign the website to make it work best for you in your work. Create piles that you feel fit naturally together and would make the most sense FOR YOU.

NAME THE PILES

Please give each pile of cards a name that you feel represents the grouping.

‘DISCARD’ AND ‘MISCELLANEOUS’ PILES

If you are unfamiliar with the content on any of the cards, do not include these cards in your groups. Put these cards in a separate pile, and name this pile the “DISCARD” pile.

If you feel that some card topics do not fit naturally into any of the groups you create, you may create a miscellaneous category. Be sure to name this pile “MISCELLANEOUS.”
BLANK CARDS

If there are any topics that have not been captured by existing cards, you can use blank cards and add those topics into your groupings.

QUESTIONS?

If you have any questions about this exercise, please contact Nancy Churchman at (613) 549-1232 ext. 214 or nchurchman@kflapublichealth.ca.

RETURNING THE CARDS

When you have completed the exercise, please staple each card pile together, place them in the enclosed envelope, and put them in the mail.

CARD LIST

- Welcome to the RRFSS website
- RRFSS Coordinator contact information
- RRFSS Chair contact information
- History of RRFSS
- Purpose of RRFSS
- List of RRFSS-partner health units and representatives
- How a health unit can join RRFSS
- How RRFSS data are collected
- Cost for a health unit to join RRFSS
- Funding received by RRFSS
- How the RRFSS questionnaire is organized
- How questions in the RRFSS survey are chosen
- The yearly timeline for the RRFSS survey
- When health units receive RRFSS data
- Who analyzes RRFSS data
- Reliability of RRFSS data
- How RRFSS relates to the Mandatory Health Programs and Services Guidelines
- How RRFSS participating health units communicate
- Who conducts the RRFSS survey
- How RRFSS results are used
- Who is interviewed in the RRFSS survey
- Who can use RRFSS results that are posted on the website
- How to get RRFSS results not posted on the website
- Who can use RRFSS questionnaires published on this website
- RRFSS Core Prevalence data
- RRFSS Questionnaires
- RRFSS Data Dictionary
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

- RRFSS Module Inventory
- RRFSS Wave List
- RRFSS Core module data analysis instructions
- RRFSS Reports
- Related links
- RRFSS Workshop information
- RRFSS Workshop presentations
- List of RRFSS-participating health units by year
- RRFSS Manual of Operations
- RRFSS data analysis SPSS macros
- RRFSS Group meeting dates

Items not currently on RRFSS website
- RRFSS Group meeting agendas
- RRFSS Group meeting minutes
- RRFSS Syntax files
- RRFSS Auto CI program
- Orientation guide for new RRFSS Representatives
## Appendix H
Card Sorting Analysis Summary

<table>
<thead>
<tr>
<th>Card Title</th>
<th>Card No.</th>
<th>About RRFSS</th>
<th>Analysis Tools</th>
<th>Contact Info</th>
<th>Discard</th>
<th>Members Ref</th>
<th>Other</th>
<th>RRFSS Policies &amp; Procedures Guides</th>
<th>RRFSS Tools &amp; Resources</th>
<th># Categories With This Card</th>
<th>Average Agreement Per Category</th>
</tr>
</thead>
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<td>Cost for a health unit to join RRFSS</td>
<td>1</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>Funding received by RRFSS</td>
<td>2</td>
<td>50%</td>
<td>25%</td>
<td>25%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>History of RRFSS</td>
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<td>100%</td>
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<td></td>
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<tr>
<td>How a health unit can join RRFSS</td>
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<tr>
<td>How questions in the RRFSS survey are chosen</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td>1</td>
<td>100%</td>
</tr>
<tr>
<td>How RRFSS data are collected</td>
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<td></td>
<td></td>
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<tr>
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<tr>
<td>How RRFSS results are used</td>
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<td></td>
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<tr>
<td>How to get RRFSS results not posted on the website</td>
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<td>List of RRFSS-participating health units by year</td>
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<td></td>
<td></td>
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<td></td>
<td>3</td>
<td>33%</td>
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<tr>
<td>List of RRFSS-partner health units and representatives</td>
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<td>50%</td>
<td></td>
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</table>
## RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

<table>
<thead>
<tr>
<th>Card Title</th>
<th>Card No.</th>
<th>About RRFSS</th>
<th>Analysis Tools</th>
<th>Contact Info</th>
<th>Discard</th>
<th>Members Ref</th>
<th>Other</th>
<th>RRFSS Policies &amp; Procedures Guides</th>
<th>RRFSS Tools &amp; Resources</th>
<th># Categories With This Card</th>
<th>Average Agreement Per Category</th>
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<td>Reliability of RRFSS data</td>
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<td>RRFSS Manual of Operations</td>
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<td>RRFSS Syntax files</td>
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<td>RRFSS Wave List</td>
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<td>RRFSS Workshop information</td>
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<tr>
<td>Card Title</td>
<td>Card No.</td>
<td>About RRFSS</td>
<td>Analysis Tools</td>
<td>Contact Info</td>
<td>Discard</td>
<td>Members Ref</td>
<td>Other</td>
<td>RRFSS Policies &amp; Procedures Guides</td>
<td>RRFSS Tools &amp; Resources</td>
<td># Categories With This Card</td>
<td>Average Agreement Per Category</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>----------</td>
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<td>When health units receive RRFSS data</td>
<td>38</td>
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<td>Who analyzes RRFSS data</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Who can use RRFSS questionnaires published on this website</td>
<td>40</td>
<td>50%</td>
<td></td>
<td></td>
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<td>25%</td>
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<td></td>
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<td>25%</td>
</tr>
<tr>
<td>Who can use RRFSS results that are posted on the website</td>
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<td></td>
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<td></td>
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<td>Who conducts the RRFSS survey</td>
<td>42</td>
<td>100%</td>
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<tr>
<td>Who is interviewed in the RRFSS survey</td>
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<td>100%</td>
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<td></td>
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<td>1</td>
</tr>
</tbody>
</table>

| # Different Cards | 26 | 13 | 5 | 5 | 18 | 4 | 2 | 8 |
| # High Agreement Cards | 17 | 4 | 0 | 0 | 3 | 0 | 0 | 0 |
| # Medium Agreement Cards | 6 | 5 | 3 | 0 | 6 | 2 | 0 | 3 |
| # Low Agreement Cards | 3 | 4 | 2 | 5 | 9 | 2 | 2 | 5 |

| Average Card Agreement | 78% | 50% | 40% | 25% | 46% | 38% | 25% | 34% |

Legend

[ = conflict, card appears in 6 or > categories]

[ = potential agreement, appears 50% > any cat or in 2 categories]

[ = agreement, appears 66% or > in a category]

[ = low agreement, appears 33% or < in category]

[ = top five result for this metric]

The Card Placement Percentage worksheet lets you quickly assess the percentile distribution of placements for any card in relation to one another. Reading from left to right along a single row, you'll see percentages that represent the placement of each card in each standardized category as a percentage of all of the different placements for that card. High percentages indicate that more participants consistently placed that card in that category; naturally, the highest percentage is 100. I refer to these percentages as the level of participant “agreement” on the placement of the cards.

The Card Placement Percentage worksheet uses conditional formatting to highlight the lowest and highest thirds of the total set of results.

The far right columns of the Card Placement Percentage worksheet show the number of different categories each card appeared in across all of the results sets, as well as the average of all the percentage values. In these summary columns, conditional formatting highlights cards that appear in a large number of different categories (in this case, six or more, which appear in red), and those that appear in only two categories (in tan). Again, the rationale is to identify items that require immediate attention, or that offer ready opportunities for redefinition.

At the bottom of the Card Placement Percentage worksheet, summary rows show:

- how many high-agreement cards appear in each category
- how many medium-agreement cards appear in each category
- how many low-agreement cards appear in each category
- the average-agreement index of all cards in the category

Interpreting the results of a card sort depends largely on the context of the exercise: what items you included, who participated, and what questions you hoped to answer or identify will all be important in shaping what you derive from the analysis. The strength of this tool is that it supports pattern analysis at more than one level: you can investigate individual cards, whole categories, and even — if you’ve defined them in advance — groups of cards and groups of categories.
If you’re using a card sort to drive the design of a new information architecture for an existing resource (perhaps navigation for a website), comparing the current location of items that fall into the lowest and highest results groupings with their user-preferred locations could indicate problems that require immediate attention or offer the greatest opportunity for improvement.

Categories that include mostly high-agreement cards and few low-agreement cards are probably well understood in the minds of the participants, and represent structures you’ll probably want to accommodate in your information architecture.

Categories with many low-agreement cards may indicate that participants were looking for a place for items they do not value or understand. Or it may mean that the labeling and content of the items is inconsistent, and users couldn’t find a location that suited both the card name and description.
Appendix I
Website Screen Captures Prior to Short-term Improvements

These screen captures were made on 7 February 2008, using Internet Explorer version 7.0.5730.11, Windows XP, and a screen resolution of 1024x768 pixels.

The RRFSS website home page. Note that the logo is in the upper right-hand corner, violating standard website practice. The circular graphics on the left-hand navigation bar suggest clickability, but are not links. The red bolded headers also strongly suggest clickability.
The About RRFSS website page. Note that the arrow designs combined with the red bolded text suggest breadcrumbs, creating confusion with the breadcrumb trail in the shaded area just above it. In fact, the red bolded items are anchor links. Note also that the RRFSS logo is not linked to the home page.
The RRFSS Partners list. Note the confusing alphabetization that impedes quick scanning for a specific region. For example, “City of Hamilton” is placed under “C” rather than “H.”
The FAQ “landing page.” Note that users must visit each of the three categories separately in order to determine the location of a specific question.
The top of the FAQ for Public Health Units section.
The bottom of the “FAQ for Public Health Units” page. Note that the underlined text suggests clickability, but is not a link.
The RRFSS Prevalence Data “landing page.” Note that users who wish to compare data for several years must repeatedly return to this page.
The prevalence data window which appears when clicking on “2006 data.” Note that the text and links are blue and underlined, in contrast to the red bolded links in the rest of the website. Also note that the list is not alphabetized.
The Questionnaire “landing page.” Note that entries are listed under one specific title, with no cross-referencing.
The window which appears when clicking on “Access to Clinical Services” in the Questionnaire list (above). Note that this file is a Word document.
The Data Dictionary “landing page.” Note that it is ordered similarly to the Questionnaires list, but that these items are identified as Word documents, unlike the Questionnaires list. Also note the alphabetical anchor links.
The page which appears when a user click on the “Access to Clinical Services” data dictionary link (above).
The Technical Information web page. Note that this is in the public area of the website.
The Reports web page.

- An Evaluation of the Rapid Risk Factor Surveillance System (RRFSS): A System to Collect Public Health Surveillance Data in Ontario (PDF) / Appendices (PDF)
- RRFSS Strategic Plan (PDF)
- RRFSS Order Effects Report (PDF)
- Enhancing Capacity for Surveillance of Chronic Disease Risk Factors in Canada (PDF)
- Seniors Who Fall (PDF)
- Fall, 2003 newsletter from the Canadian Society of Epidemiologists and Biostatisticians (PDF)
- Measuring Parenting Capacity: Perinatal and Child Health Survey Strategy Initiative Project Status Report, May 2002 (PDF)
- An Evaluation of The Rapid Risk Factor Surveillance System, 2002 (ZIP) or link to online version here
The Related Links web page. Note that the link to the “Ontario Health Intelligence Unit Program” is a dead link.
The Workshops web page. The repetition of text in the long links harms scannability. Although not visible in this screen capture, link formats are inconsistent from year to year; those for earlier years are less informative.
The Contact Information web page.
The following two screen captures show the certificate error message received when clicking on the Members area link in the navigation bar.
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

There is a problem with this website's security certificate.

The security certificate presented by this website was not issued by a trusted certificate authority.

Security certificate problems may indicate an attempt to fool you or intercept any data you send to the server.

We recommend that you close this webpage and do not continue to this website.

- Click here to close this webpage.
- Continue to this website (not recommended).
- More information
The Members Area login page shown once a user clicks on “Continue to the Website” above. Note that the “Logout” link on the right makes little sense before a user has logged in.
The Members Area “landing page.” Note that the RRFSS Inventory and the Wave List are both also available in the Technical Information section in the public area of the website.
The page shown when a member logs in incorrectly. Note that there are no instructions about how to retrieve the correct username and/or password.
Appendix J
Website Screen Captures Following Short-term Improvements

These screen captures were made on 11 March 2008, using Internet Explorer version 7.0.5730.11, Windows XP, and a screen resolution of 1024x768 pixels.

The link-rich home page includes the following changes:
• logo in upper left-hand corner of page,
• menu along top of page with links to “Home,” “Contact Us,” “Feedback” and “Site Map” along with a site search function,
• “change font size” option,
• links in blue to clearly indicate clickability, and
• reorganized site structure.
The “Contact Us” page.
The Site Map, which is regenerated automatically when pages are added to the website or relocated within the website.
The “About RRFSS” page. Note that the anchor links at the top in blue are easily distinguishable from the header “History” in bolded black text.
The “RRFSS survey” landing page.”
The “Questionnaires” page.
The “Reports and Presentations” landing page.
RRFSS: Report on the RRFSS Website Enhancement & Evaluation Project

The “Evaluations” page.
The “Workshop Presentations” page.
The “Other Reports” page.
The “Forms and Technical Documents” page.
The “FAQ” page. Note that all questions are listed at the top of the page, for ease of scanning.
Further down the “FAQ” page.
The members’ area login page.
The “Members” page, prior to the addition of 2007 Steering Group minutes.
The members’ area logout page.
The “RRFSS Participants” page.