1
RAPID RISK FACTOR SURVEILLANCE SYSTEM - 2002/2003 UPDATE

The Health and Emergency Medical Services Committee recommends:

1. The presentation by Brenda Guarda, Manager, Epidemiology and Research and William Kou, Epidemiologist, Health Information and Planning Branch, be received;

2. The recommendation contained in the following report, September 10, 2003, from the Acting Commissioner of Health Services be adopted; and

3. Staff be requested to report back in six months with results of new and/or enhanced programs relating to concerns arising from the findings of this report.

1. RECOMMENDATION

It is recommended that:

1. Health and Emergency Medical Services Committee and Regional Council receive this report regarding the 2002/2003 results from the Rapid Risk Factor Surveillance System for information purposes.

2. PURPOSE

The purpose of this report is to provide Health and Emergency Medical Services Committee and Regional Council with highlights of the data obtained through the Rapid Risk Factor Surveillance System (RRFSS) initiative during its second complete year of operation in York Region. In addition, this report presents findings related to emerging health issues such as SARS and West Nile Virus.

3. BACKGROUND

RRFSS has been operating in York Region since February 2001. Currently, the Health Services Department has received data for the months up to and including June 2003. RRFSS not only provides data on behavioural risk factors but also asks questions related to knowledge and awareness of health-related conditions and events. This information can be used to direct policy initiatives, plan and target programs and assist with evidence-based decision making. Twenty-three of 37 health units now participate in this initiative, representing over 10 million of the provincial population. Previous reports have presented background information on the RRFSS initiative and the first year of RRFSS results. This report focuses on trend analysis and some municipal-level findings.

3.1 Brief Description of RRFSS

RRFSS is a monthly telephone survey conducted by the Institute for Social Research (ISR) at York University, on behalf of the 23 participating health units. All York Region adults 18 years of age and over are eligible for participation in the 20-minute, 100-question survey. The questions are divided into two types: core questions that all health units must ask and optional questions that individual health units can choose to ask. ISR collects the data using a Computer Assisted Telephone Interview (CATI) system. The University provides the data in the Statistical Package for the Social Sciences (SPSS) format for analysis by the respective health units. Unique identifiers (names, telephone numbers) are removed from the datasets in order to protect the confidentiality of the respondents.

3.1.1 Progress to Date

RRFSS' expansion from three health units in January 2001 to twenty-three health units for 2003 indicates recognition of the importance of timely local-level health data.

RRFSS has now developed into a surveillance system that can be utilized to monitor knowledge and behaviours related to emerging health issues, and health-related behaviours such as tobacco use. In fact, the data has been utilized in the *York Region Health Status Report 2002: A Measure of Health*, in the Vision 2026 *Towards the Vision: First Annual Report on Indicators of Progress* and for the planning and evaluation of Health Services Department programs and services.

The flexibility of the survey tool has permitted the Health Services Department to collect information on emerging public health issues such as Severe Acute Respiratory Syndrome (SARS) and West Nile Virus. Questions regarding the SARS outbreak in York Region were added from April to June 2003, temporarily expanding the survey to 148 questions.

Commencing in the fall of 2003, York Region's 2002 RRFSS core data will be posted to a public domain web site hosted by the Central East Health Information Partnership (CEHIP). This web site stores data from other health units, thus permitting the comparison of RRFSS results across jurisdictions. In addition, it is anticipated that this access to health unit-specific data will promote the use of RRFSS results within the York Region Health Services Department and will support program planning and evaluation activities.

The large number of health units participating in RRFSS has highlighted the need for coordination among the RRFSS partners. As of June 2003, a RRFSS Coordinator has been employed by the Association of Public Health Agencies. The coordinator's role is to support the ongoing activities of RRFSS, facilitate collaboration among RRFSS partners and to liaise with the ISR.

4. ANALYSIS AND OPTIONS

4.1 Highlights of the RRFSS Results

All results presented in this report correspond to the latest year of data collection, representing the period of February 2002 to February 2003. If there are no evident changes in RRFSS results between 2001/02 and 2002/03, the discussion focuses on the most recent year of RRFSS data. However, in order to improve the sample size and be able to report data at the municipality level, results from the two-year period February 2001 to February 2003 have been combined. Percentages reported with an * symbol should be interpreted with caution due to small numbers.

4.1.1 Self-Rating of Own Health

Of the 1,218 residents surveyed in York Region between February 2002 and February 2003, 286 (24%) rated their general health as excellent, 427 (35%) as very good and 386 (32%) as good. One hundred and thirteen individuals (9%) rated their health as fair or poor. Self-rating of general health among York Region respondents was very similar to the RRFSS results from 2001/02.

The latest two-year period allows sufficient data to report selected results by York Region area municipality (Table 1). The highest percentage of respondents reporting excellent, very good or good health among all area municipalities resided in Whitchurch Stouffville (96%). The lowest percentages of respondents reporting good or better health were Georgina residents (85%) and King respondents (89%).

Table 1
Percentage of Adults Ages 18+ Reporting Excellent, Very Good or Good Health by York Region Area Municipality, February 2001 to February 2003

Municipality	Males	Females	Both Sexes
Aurora	94%	96%	95%
East Gwillimbury	90%	92%	91%
Georgina	83%	87%	85%
King	94%	85%	89%
Markham	94%	92%	93%
Newmarket	93%	90%	91%
Richmond Hill	95%	84%	89%
Vaughan	92%	93%	93%
Whitchurch Stouffville	97%	96%	96%
York Region Total	**93%**	**91%**	**92%**

The prevalence of self-reported chronic diseases of public health importance (high blood pressure, asthma, and diabetes) has also been tracked through RRFSS. Respondents were asked if they had ever been diagnosed with any of these conditions by a doctor or other health care professional. Fifteen per cent (15%) of adults 18 years of age or over indicated that they have been diagnosed with high blood pressure, 10% with asthma and

4% with diabetes. The prevalence of these chronic conditions is slightly higher than the prevalence reported in 2001/02, of 13%, 9% and 3% respectively. The 2002/03 findings represent about 88,000 York Region adults diagnosed with high blood pressure, 59,000 adults with asthma and 23,000 with diabetes.

4.1.2 Respondents' Use and Perception of Availability of Certain Health-related Resources in The Regional Municipality of York

Almost 9 in 10 respondents (86%) had made, or had tried to make, an appointment with a family doctor in the past 12 months and, of these, 17% or approximately 100,000 York Region residents age 18 years and over, had difficulty getting an appointment. The main reason given was having to wait too long for an appointment (67%). These figures are slightly higher than the percentages reported in 2001/02, 85%, 14% and 63% respectively. Municipality-level results will be reported once the sample size permits.

4.1.3 Respondents' Awareness of Services Available through York Region Health Services Department

Respondents' awareness of *Health Connection*, the Region's confidential telephone counselling and referral line, as well as Internet users connecting to the Region's Web site is also available through RRFSS.

Of the 617 adults surveyed in 2002 to February 2003, 16% had heard of or read about the Health Services' *Health Connection* line, compared to 17% in 2001/02. RRFSS results show that awareness of *Health Connection* rose significantly to 23% from March to June 2003, likely a result of increased promotion during the SARS outbreak.

In 2002/03, over 7 in 10 York Region respondents (73%) reported personally using the Internet, unchanged from 2001/02. However, the use of the Internet to access health-related information increased significantly to 56%, up from 45% in 2001/02. During the SARS outbreak, RRFSS results from March to June 2003 indicate that use of the Internet to access health-related information continued to rise to 61%.

Of those who utilize the Internet to access health-related information, 13% have accessed the York Region Health Services Web site, down slightly from 16% in 2001/02.

4.1.4 Knowledge of Risk Factors for Certain Chronic Diseases and Respondents' Behaviour Related to Knowledge of Risk Factors

RRFSS also asks York Region residents about their knowledge of the major risk factors (smoking, physical inactivity and poor nutrition) associated with chronic diseases such as heart disease and cancer. Only 36% of respondents could identify smoking as a risk factor for heart disease while 40% knew about lack of exercise and 65% of respondents cited poor nutrition. Knowledge levels have not changed significantly from those reported in 2001/02.

In addition, knowledge of risk factors associated with cancer remains relatively unchanged from the 2001/02 knowledge levels. Only 47% of respondents identified

smoking, 24% identified poor nutrition and 18% cited sun exposure, while only 4% cited physical inactivity as risk factors for cancer.

4.1.5 Knowledge of Specific Health Programs Available in Ontario

This subject area refers to York Region residents' participation in provincial programs and services. A key example of such a program is the universal flu vaccination program introduced in Ontario in the fall of 2000.

During the 2002/2003 influenza season, 30% of respondents 18 years of age and over received the flu vaccine, similar to the 31% vaccination rate for the 2001/2002 influenza season. Influenza vaccination was highest among seniors. Over 6 in 10 York Region residents age 65 and over (62%) reported having a flu shot during the 2002/2003 influenza season, compared to 69% during the previous influenza season.

4.1.6 Respondent's Knowledge and Attitudes about Tobacco Use

Questions regarding respondents' views about smoking in their homes and in restaurants were posed during the survey. Four hundred and eighty-five (53%) York Region adults indicated that smoking should not be allowed in any section of a restaurant while 35% indicated that smoking should only be allowed in enclosed sections. The corresponding figures for 2001/02 were 51% and 35% respectively.

Respondents were also asked about the rules surrounding smoking in their homes. In 2002/03, 72% of respondents stated that smoking was not allowed anywhere in their homes, an increase from 67% in 2001/02.

4.1.7 Smoking Status

Tobacco use among adults in the community is an important indicator monitored through RRFSS. A smoker is anyone who has smoked at least 100 cigarettes in his/her lifetime. This definition is consistent with other recent surveys including Statistics Canada's Canadian Community Health Survey and the Centers for Disease Control and Prevention's Behavioural Risk Factor Surveillance System. Eighteen percent (18%) of the 1,213 respondents surveyed in 2002/03 were reported to be current smokers, a decrease from 22% in 2001/02. Table 2 shows current smoking status in York Region by area municipality for the 2-year period February 2001 to February 2003. The proportion of respondents stating that they were current smokers was highest among Georgina and East Gwillimbury respondents at 45% and 37%, respectively.

Table 2
Percentage of Adults Ages 18+ Who Are Current Smokers,
by York Region Area Municipality, February 2001 to February 2003

Municipality	Males	Females	Both Sexes
Aurora	24%*	16%*	20%
East Gwillimbury	45%*	29%*	37%
Georgina	46%	45%	45%
King	--	--	17%
Markham	16%	12%	14%
Newmarket	27%	17%*	22%
Richmond Hill	16%	19%	18%
Vaughan	24%	18%	21%
Whitchurch Stouffville	30%*	--	18%
York Region Total	**22%**	**18%**	**20%**

**Interpret with caution due to small numbers*
--Not releaseable due to small sample size and high variability of the estimate

4.2 Emerging Public Health Issues

The following section describes additional questions added to the core RRFSS questionnaire. The flexibility of the survey tool enables health units to add or delete modules depending on the need to focus on issues of a "late breaking" or public health emergency nature. Thus, public health issues of the utmost importance are always being addressed.

4.2.1 SARS Outbreak

In response to the SARS outbreak, the York Region Health Services Department has undertaken an examination of the following topics: awareness of SARS, impact of the SARS outbreak, perception of the risk of SARS, and the emotional and behavioural responses to the SARS outbreak. Two hundred and eighty-four interviews of York Region residents were conducted between April and June 2003.

Ninety-nine percent (99%) of theYork Region-area respondents surveyed were aware of the SARS outbreak. Seventy-seven percent (77%) of residents made an effort to watch television, listen to the radio, read the newspaper or look at the Internet specifically to find out about the SARS outbreak. Of these respondents, 75% made a great deal of effort or considerable effort to find out about the SARS outbreak.

York Region residents were affected by the SARS outbreak in the following ways:

- Eleven percent (11%*) reported that people they worked or went to school with, were hospitalized, quarantined or isolated by health officials
- Twenty percent (20%) reported that friends, neighbours or acquaintances, or family members other than the ones that they live with were hospitalized, quarantined or isolated by health officials

- Five percent (5%*) reported that their place of work, or a household member's place of work was closed down for a period of time
- Seven percent (7%*) reported that regular classes at their school or university were cancelled
- Twenty-one percent (21%) reported that they had trouble making an appointment or had hospital, doctor's office, clinic or medical laboratory appointments postponed or cancelled
- Twenty-two percent (22%) reported that visits to family or friends in hospitals or nursing homes were not allowed or restricted
- Nineteen percent (19%) reported cancelling an overnight trip, a trip out of town, or that visitors from out of town postponed or cancelled a visit

** Interpret with caution due to small numbers*

One in five (20%) York Region respondents felt at risk of becoming infected with SARS. Of these respondents, twenty-six percent (26%*) felt very likely or somewhat likely to become infected with SARS.

Thirty-five percent (35%) of residents interviewed experienced feelings of nervousness or worry because of the SARS outbreak in the past month. Among those reporting nervousness or worry, twelve percent (12%*) reported that they called a telephone help line, called or saw a doctor, nurse, psychologist, social worker or any other health care worker.

During the SARS outbreak, York Region residents were advised that thorough handwashing is the best way to prevent the spread of illness. Residents were also advised to avoid direct face-to-face contact with someone ill with this disease as well as touching tissues and other articles used by someone ill with this disease. York Region respondents reported changes in behaviour specifically because of the SARS outbreak:

- Thirty-two percent (32%) avoided crowded, enclosed public spaces such as trains, buses and subways or elevators
- Twenty-nine percent (29%) avoided going out to public places such as shopping malls and sports areas, or restaurants and bars
- Seventy-two percent (72%) washed their hands more frequently and thoroughly
- Sixty-five percent (65%) avoided people who were coughing and sneezing

4.2.2 West Nile Virus

West Nile Virus knowledge and protective behaviours are being assessed on a seasonal basis between May and September of each year. During the 2002 season, 82% of the 506 respondents surveyed had heard about West Nile Virus. Based on early data from May and June 2003, the percentage of respondents who had heard about West Nile Virus had increased significantly to 98%.

4.2.3 By-laws and Pesticides

York Region respondents are surveyed about their level of support for pesticide by-laws. Sixty-two percent of respondents would support a by-law that bans the use of pesticides

on municipal properties such as parks and sports fields, down from 72% in 2002. Six in 10 respondents (61%) would support a by-law that bans the use of pesticides on commercial properties such as land owned by private businesses or golf courses, down from 65% in 2002. More than half (57%) would also support a by-law that bans the use of pesticides on private lawns and gardens, down from 62% in 2002.

4.3 Next Steps

RRFSS data will continue to be utilized in the planning and evaluation of all Health Services Department programs and services. The use of this valuable source of data by the Department's staff will be accomplished by heightening its awareness via program team presentations and the production of RRFSS reports. The flexibility and adaptability of this surveillance tool will continue to be utilized in addressing emerging public health issues as they arise. Further analysis of the data at the municipal level will be conducted and reported in the future as sample size permits.

5. FINANCIAL IMPLICATIONS

Contracts with York University for the administration of RRFSS are renewed on an annual basis. The cost of the 2003 contract with York University is $40,785 (including GST) and has been accommodated within the Public Health Branch cost-shared budget.

The cost for participation in RRFSS is currently borne by each participating health unit.

6. LOCAL MUNICIPAL IMPACT

The annual results of the RRFSS initiative have provided the Health Services Department with timely information about risk factor behaviours, health knowledge and awareness levels and is continuing to assist in the planning and evaluation of programs and services.

7. CONCLUSION

Results from the second full year of the RRFSS initiative has provided information that assists in the provision of effective programs and services to York Region residents. This initiative has developed into an ongoing surveillance system. This data source has now provided the capability to monitor trends over time, to investigate health-related issues at the municipal level and to address evolving issues of public health importance on a timely basis.

In order to create an effective, province-wide surveillance system and to allow true comparison of data between all 37 health units, formal provincial recognition of the successes of this program to date and a commitment to across-the-board funding by the Province of Ontario, Ministry of Health and Long-Term Care remains an issue.

The Senior Management Group has reviewed this report.