

TORONTO STAFF REPORT

June 3, 2003

To: Board of Health
From: Dr. Sheela V. Basrur, Medical Officer of Health
Subject: Health Canada Funding for a SARS Household Transmission Study

Purpose:

This report seeks approval to receive funding from Health Canada to carry out a Household Transmission Study of SARS in Toronto.

Financial Implications and Impact Statement:

Health Canada has approved the allocation of up to \$36,000 to Toronto Public Health for a study of SARS transmissions within households. Funding for this project will cover the overtime costs for Toronto Public Health nurses to conduct this study.

Approval of this report will result in an increase of \$36,000 in the Public Health 2003 gross operating budget with a matching amount in the revenue budget, but it will not affect the net operating budget. No additional staff positions are required and there are no financial implications in future years.

The Chief Financial Officer and Treasurer has reviewed this report and concurs with the financial impact statement.

Recommendations:

It is recommended that:

- (1) City Council authorize the Medical Officer of Health to sign a Memorandum of Understanding between Health Canada and the City of Toronto, regarding funding of the SARS Household Transmission Study;
- (2) City Council authorize a technical adjustment to increase the Toronto Public Health 2003 Operating Budget by \$36,000 (gross) and \$0 (net);

- (3) the Board of Health forward this report to York Region Health Services for information; and
- (4) the appropriate City Officials be authorized and directed to take the necessary action to give effect thereto.

Background:

Severe Acute Respiratory Syndrome (SARS) is a respiratory illness that has been described in patients in Asia, North America and Europe. SARS is characterized by fever, malaise, cough, shortness of breath and abnormalities on chest radiogram (x-ray) and is thought to be caused by a novel virus. SARS was first identified in Toronto in early March 2003. Transmission of SARS to household members of cases has occurred since the illness was first identified.

The early identification of index cases in households, the immediate isolation of infected persons, and the quarantine of their exposed household members appear to be essential to disease prevention and control. A better understanding of the transmission of SARS within households will help public health officials both nationally and internationally understand the public health measures that protect individuals from becoming ill if exposed to SARS in a family member. The results of this study will also provide information regarding the duration of infectivity and potential spread of this illness.

The overall objective of this research study is to determine the risk factors associated with the transmission of SARS within households.

Specific objectives are to determine:

- (a) Factors that affect the risk of transmission within households (household risk factors and individual risk factors);
- (b) The seroprevalence of the implicated coronavirus among household members.

Comments:

In April 2003, Toronto Public Health, York Region Health Services and Health Canada initiated discussions on a collaboration to investigate the factors associated with household transmission of SARS. The study protocol underwent a successful ethics review at all three organizations and the funding to carry out the study was approved by Health Canada. The funds available to Toronto Public Health are for the overtime salaries of 12 nurses who will work as study interviewers and venipuncturists (trained staff who take blood samples). Health Canada will cover directly all other expenses, including printing of questionnaires, data entry and analytic support. Equipment and processing costs for serum samples are being covered by the National Microbiology Laboratory in Winnipeg.

Exact costs incurred by nurses as overtime for their work on this study will be paid to Toronto Public Health upon completion of the study, under the conditions specified in the Memorandum of Understanding with Health Canada.

Nurse volunteers have all worked on the SARS outbreak in some capacity and are trained venipuncturists. A half-day training session will ensure consistent use of the study tools and understanding of the research goals and objectives. Their work and the progress of the study will be overseen by a Toronto Public Health manager who is also a trained epidemiologist along with a Community Medicine physician, both of whom are members of the Toronto Public Health SARS response team.

Conclusions:

A research study on household transmission of SARS has been funded by Health Canada in collaboration with Toronto Public Health and York Region Health Services. This report seeks approval from the Board of Health and City Council for a technical adjustment to the Toronto Public Health operating budget and corresponding authority to disperse these funds in accordance with a Memorandum of Understanding between the City of Toronto and Health Canada. The results of this study will provide important information on the spread of SARS within households and will inform future public health control measures.

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