

RRFSS Reports on... Personal and Household Protection Against West Nile Virus

West Nile Virus Protection

Community outreach is one component of Toronto Public Health's (TPH) West Nile Virus (WNV) Program.



This includes an education campaign on what people can do to reduce the risk from WNV. TPH's outreach program supplements information provided by Health Canada and the Ontario Ministry of Health and Long-Term Care. The messages focus on personal protection measures and reducing the number of mosquitoes around the home.

Personal protection measures include:

- wearing light-coloured clothing, long-sleeved shirts, long pants, shoes and socks.
- wearing insect repellent during the evening and early morning.

The main steps to reduce mosquitoes in and around the house include:

- using fine-mesh screens on windows and doors, and ensuring that screens fit tightly and do not have holes.
- eliminating mosquito breeding sites, for example, stagnant water collected in toys, garbage cans, plant containers, gutters, downspouts, eaves troughs, birdbaths, wading pools, tires, animal dishes, etc.

For more information on how to protect yourself and your family from WNV, please visit Toronto Public Health's web site at www.toronto.ca/health.

Rapid Risk Factor Surveillance System

In the last Health Status News (Issue 4-1, August 2006), we described WNV and outlined the components of TPH's WNV Program. We also described the Rapid Risk Factor Surveillance System (RRFSS), a monthly phone survey used by TPH to monitor community knowledge, attitudes and risk behaviours related to a variety of public health issues including WNV. For more information on RRFSS, please visit www.rfss.on.ca.

Between June and September 2005, RRFSS surveyed 400 Toronto residents about WNV awareness, and personal and household protective behaviours. Between June and September 2004, an over-sample of 800 residents was obtained for protective behaviours.

Fewer Torontonians Covering Up – Most Take Protective Measures For Their Households

In 2005, approximately one in five Toronto residents surveyed used protective clothing (e.g. long sleeves, long pants, and socks) during outdoor activities to protect themselves from mosquitoes, down from just over one in four respondents in 2004. As well, less than one in six reported using insect repellent containing DEET during outdoor activities. Over half of Toronto residents stayed away from areas where mosquitoes are active. One in five avoided mosquitoes by limiting their outdoor activities from early evening to early morning. These results are not significantly different from those in 2004.

In contrast to these findings, the majority of residents are protecting themselves by taking measures around their homes. Detailed results are reported on the following page.

Personal Protective Behaviours

In the 2005 survey, 18.8% ($\pm 4.0\%$) of Toronto residents reported in the last month, covering up all or most of the time with long sleeves, long pants, and socks during outdoor activities to protect themselves from mosquitoes. The decrease from the previous year [28.0 % ($\pm 3.2\%$)] was statistically significant.

In 2005, 14.5% ($\pm 3.6\%$) of residents reported using insect repellent containing DEET all or most of the time during outdoor activities. The increase from 2004 [11.7 % ($\pm 2.3\%$)] was not statistically significant.

In 2005, 51.4 % ($\pm 4.9\%$) of residents reported avoiding shaded or wooden areas or areas of stagnant water to protect themselves against mosquito bites. This was similar to the 2004 findings [52.7 % ($\pm 3.5\%$)].

In 2005, 20.1 % ($\pm 3.9\%$) of residents reported limiting their outdoor activities from early evening to early morning to avoid mosquitoes. This was a four percentage point decrease from 2004 [24.6 % ($\pm 3.0\%$)]. The decrease was not statistically significant.

The table on the right summarizes the 2004 and 2005 RRFSS results for personal protective measures.

RRFSS Results for WNV Personal Protective Behaviours				
Personal Protective Measures	2004 estimate	CI*	2005 estimate	CI*
<i>In the last month...</i>				
...covered up all or most of the time with long sleeves, long pants, and socks during outdoor activities to protect themselves from mosquitoes	28.0%	$\pm 3.2\%$	18.8%	$\pm 4.0\%$
...did not cover up because they felt that mosquitoes were not a problem or that there were no mosquitoes	29.4%	$\pm 4.1\%$	32.7%	$\pm 5.9\%$
...used insect repellent containing DEET all or most of the time during outdoor activities	11.7%	$\pm 2.3\%$	14.5%	$\pm 3.6\%$
...did not use DEET during outdoor activities because they felt that mosquitoes were not a problem or that there were no mosquitoes	28.4%	$\pm 4.1\%$	28.4%	$\pm 5.7\%$
...avoided shaded or wooden areas or areas of stagnant water to protect themselves against mosquito bites	52.7%	$\pm 3.5\%$	51.4%	$\pm 4.9\%$
...limited their outdoor activities from early evening to early morning to avoid mosquitoes	24.6%	$\pm 3.0\%$	20.1%	$\pm 3.9\%$

Source: RRFSS (June – September 2004, June – September 2005)

*Confidence Intervals

Response estimates are accompanied by 95% confidence intervals. This means that the true value is within this range 19 times out of 20. The difference between estimates is statistically significant if the confidence intervals do not overlap.

Household Protective Behaviours

Many Toronto households are taking protective measures around their homes to reduce exposure to mosquitoes.

In 2005, 94.9% ($\pm 2.1\%$) of households reported not having containers of stagnant water outside of their homes where water was allowed to stand for more than 7 days. These findings were similar to those in 2004 [94.7% ($\pm 1.5\%$)].

In 2005, 84.6% ($\pm 3.5\%$) of households reported that windows or doors were not left open during the summer months, or that screened windows or doors did not have tears or holes. The increase from 2004 [79.6% ($\pm 2.8\%$)] was not statistically significant.

Health Status News is an ongoing series of information updates that summarize new data and events related to Toronto's health status.

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The Toronto Public Health Metrics and Planning unit measures the health of Toronto's populations and the performance of TPH programs to help guide the organization on its mission.

For more information on Toronto's health status, please visit our web site at: www.toronto.ca/health/map