



**STAFF REPORT
ACTION REQUIRED**

Bed Bug Control Strategy Update

Date:	January 13, 2012
To:	Board of Health
From:	Medical Officer of Health
Wards:	All Wards
Reference Number:	

SUMMARY

Bed bug infestations in the City of Toronto continue to occur in all parts of the City and across all social and economic strata. Based on research (including data collected by TPH), vulnerable populations have a disproportionate share of the burden of bed bugs. The City's most vulnerable lack the financial resources and/or face physical or mental challenges affecting their ability to address infestations and prevent reoccurrence.

Toronto Public Health has been involved in supporting bed bug control activities since 2005. As the lead for the 2011 bed bug control strategy, TPH has a time-limited funded mandate for bed bug control activities.

In 2011, City Council approved one-time municipal funding in the amount of \$87,000 for the City's integrated bed bug response, which was allocated to support labour intensive unit preparation and cleaning activities in 2011.

In addition, in April 2011, the Government of Ontario committed to TPH \$255,060 in on-going provincial funding for three public health nurses, and an additional \$1,216,518 in one-time provincial funding for bed bug control activities (such as prevention, assessment, identification, and treatment of bed bug infestation for the City's most vulnerable populations). The one-time funds must be spent by March 31, 2012.

City Council approved receipt of the above noted provincial funding, including the three public health nurse positions, in September 2011. In view of 2012 operating budget reductions, TPH will be unable to continue the current level of bed bug control activities beyond March 31, 2012 without continued provincial funding.

This report provides the Board of Health with an update on bed bug control activities to date, the on-going need and demand for the program and resources, and recommends continued provincial funding beyond March 31, 2012.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health reaffirm its direction to the Medical Officer of Health to provide Toronto Public Health's bed bug control services in accordance with approved dedicated provincial and municipal funding in 2012.
2. The Board of Health request the Ministry of Health and Long-Term Care to provide a clear commitment to on-going base funding for all components of the bed bug control strategy starting April 1, 2012.
3. City Council request the Ministry of Health and Long-Term Care to provide a clear commitment to on-going base funding for all components of the bed bug control strategy starting April 1, 2012.
4. This report be shared with Ontario Boards of Health for information and consideration.

FINANCIAL IMPACT

Other than the above mentioned issue of financial sustainability for bed bug control activities beyond March 31, 2012, there are no financial impacts to be noted.

DECISION HISTORY

There is a history of reports, decisions and recommendations made by the Board of Health regarding bed bug control activities dating back to 2008. The history details the extensive efforts made by the City to secure the funding needed to address bed bug infestations affecting Toronto residents, including the City's most vulnerable populations.

City Council approved the most recent staff report on September 21, 2011, which included approval to receive the provincial funding enhancements (three permanent public health nurses and one-time provincial funding for bed bug control activities).

Background Information

2008: HL12.4 – Bed Bug Issues in Toronto – Staff Report

(<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2008.HL12.4>)

HL19.8 - Toronto Bed Bug Project Update - Staff Report

(<http://www.toronto.ca/legdocs/mmis/2008/hl/bgrd/backgroundfile-17412.pdf>)

2009: HL26.6 - Toronto Public Health's Response to Bed Bugs - Staff Report

(<http://www.toronto.ca/legdocs/mmis/2009/hl/bgrd/backgroundfile-25109.pdf>)

2010: Toronto Bed Bug Project - 2010 Update - Staff Report

(<http://www.toronto.ca/legdocs/mmis/2010/hl/bgrd/backgroundfile-33847.pdf>)

2011: HL5.6 - Budget Adjustments to the Toronto Public Health 2011 Approved Operating Budget – Staff Report

(<http://www.toronto.ca/legdocs/mmis/2011/hl/bgrd/backgroundfile-38326.pdf>)

HL6.2 - Bed Bug Control Strategy Update – Staff report

(<http://www.toronto.ca/legdocs/mmis/2011/hl/bgrd/backgroundfile-39646.pdf>)

BU13.4 and EX9.9 - Supplementary Report regarding the Budget Adjustments to the Toronto Public Health 2011 Operating Budget: Bed Bug Control Strategy

(<http://www.toronto.ca/legdocs/mmis/2011/bu/bgrd/backgroundfile-39941.pdf>)

ISSUE BACKGROUND

With a resurgence of bed bug infestations in all areas of the community, the City of Toronto's experience is similar to that of other major cities in North America including Vancouver, New York City, and Chicago. Toronto Public Health continues to receive a significant number of requests for support, advice and service regarding bed bug infestations from all members of the public – regardless of an individual's or organization's economic or social means.

Impact on Human Health:

The majority of individuals exposed to bed bug infestations do not present with any clinical signs or symptoms other than a slight redness around the area of the bed bug bite. In some cases however, the presence of raised nodules and itchiness can result in bacterial infections from the scratching of these sites, which may then lead to cellulitis. In very rare cases, individuals may experience allergic reactions, asthma and/or anemia.

Impact on the City's Vulnerable Populations:

The population most severely impacted by bed bug infestations – and reinfestations – continues to be the City's vulnerable, which includes the frail elderly, people living with mental and physical challenges, and low income individuals and families.

The psychosocial impact is a significant human health concern. Vulnerable clients with infestations must deal with issues of social isolation, stigmatization and anxiety. These individuals have difficulty in accessing resources and assistance, not only to treat bed bug infestations, but supports and services for other underlying health concerns.

As these individuals often also lack the financial means for treatment and prevention, the end result is often chronic or reoccurring infestations, which not only continues the cycle of isolation and psychosocial effects, but the proliferation of bed bug infestations in other residential and community settings. It is for these reasons that the bed bug control strategy and activities focus on this sector.

Both TPH and the City of Toronto (through the Toronto Bed Bug Working Group) have actively sought sustainable provincial funding to support bed bug control activities since 2008. A detailed business case was submitted to the Ontario government by the City in June 2010, which helped secure the 2011 provincial funding (total of \$1,471,578 gross, \$0 net) offered by the province.

In September 2011, City Council approved the receipt of the provincial funding, of which a majority (\$1,216,518 gross, \$0.00 net) is available on a time-limited basis (from April 1, 2011 – March 31, 2012).

COMMENTS

In 2011, TPH with City partners have built a comprehensive approach to bed bug control. In addition to funding the TPH Bed Bug Team, the provincial funding enhancement in 2011 enables TPH to support City partners to implement key bed bug activities within their respective jurisdiction – particularly for Toronto's most vulnerable populations, most of who live in multi-unit residential buildings or use the shelter system.

Table 1 outlines TPH's allocation of the provincial funding enhancement, including City partner activities in Shelter Support and Housing Administration (SSHA) and Toronto Community Housing Corporation (TCHC).

Table 1 –Allocation of 2011-2012 Provincial Funding

Activity/ Service	Description	Allocation
Client-centred Expenditures	<ul style="list-style-type: none"> Bedding encasements (partner with corporations for donation of bedding encasements when possible), caulking supplies, vacuum cleaners, laundry costs, and other apartment preparation supplies. 	\$ 30,000
	<ul style="list-style-type: none"> Unit preparation and extreme cleaning costs (undertaken by third party) for vulnerable clients who do not have the ability or capacity undertake this work, or the financial means to cover the costs. 	\$ 40,000
	<ul style="list-style-type: none"> Replacement furniture for vulnerable clients who have had to discard furniture and bedding as a result of bed bug infestations – to partner with the Furniture Bank where possible. 	\$75,000
Increasing Community Capacity	<ul style="list-style-type: none"> For not-for-profit community organizations to support bed bug control activities (education on the prevention and treatment of bed bug infestations) and to build capacity for bed bug control in the community 	\$100,000
Shelter, Support and Housing Administration	<ul style="list-style-type: none"> To support bed bug control in the City's shelter system. 	\$100,000
Toronto Community Housing Corporation	<ul style="list-style-type: none"> To support expanding existing capacity to respond to bed bug infestations and reoccurring infestations, including identification, unit preparation and support, and extreme cleaning coordination. 	\$100,000
TPH On-going (Permanent) Funding for Three PHNs		\$255,060
TPH One-time funding for TPH Bed Bug Team – PHIs		\$771,518
Total Provincial Funding Enhancement 2011 - 2012		\$1,471,578

The Toronto Public Health now has a Bed Bug Team that consists of 10 staff: three public health nurses (PHNs), six public health inspectors (PHIs) and one manager.

Public Health Nurses:

Three full-time PHNs support the 2011 bed bug control activities. These nurses each have a geographic area to cover, and work with vulnerable clients with multiple health issues including medical, physical (e.g. disabilities) and mental health issues, in addition to lacking basic necessities (basic financial resources, food, and clothing).

Due to the multiple health issues and lack of basic necessities, intensive nursing intervention is required to develop and implement the plan of action for the client in order to ensure successful treatment of the infestation and minimize the chance of reinfestation. This includes a comprehensive nursing assessment, health services referral and supports, and in some cases transfer to temporary accommodation (during unit preparation and treatment).

The province has committed to on-going funding (\$255,060 gross, \$0 net) for these three PHN positions to address the health components related to bed bug infestations experienced by the City's most vulnerable populations.

Public Health Inspectors:

Inspection services are also critical to the City-wide bed bug strategy. Six PHIs work closely with the PHNs, and coordinate unit inspections and assessments, design and implement plans of action (integrated pest control), educate individuals and multi-residential communities on prevention of bed bug infestations and coordinate furniture replacement where necessary.

Case Examples of the Services Provided to Vulnerable Populations:

The following case examples serve to illustrate the complex impacts of bed bug infestations on vulnerable individuals and the range of supports and services required to deal with them successfully.

Case Example 1:

An 81-year-old male living alone in a bachelor unit had been dealing with a severe bed bug infestation for a year. Client suffering from sleep deprivation, open bed bug bite-related sores on his legs and edema of the feet; and was sleeping in a plastic chair in the middle of the room in an attempt to avoid bites (floor of the entire unit was covered in blood smears, dead bed bugs and all stages of live bed bugs).

Client was moved into a new unit eight days after initial assessment, provided with a new bed, donations of food and clothing, and connected with a primary care provider and local seniors group.

Case Example 2:

A 67-year-old male with left-sided stroke and memory loss was living alone in a severely bed bug-infested bachelor unit, and was estranged from all family and friends.

Client reported sleep deprivation and all health services had been cut off due to the infestation – providers stated they would only come back into a unit that had been deemed free of bed bugs.

The client was moved into a new unit. A new bed, replacement furniture and small appliances provided. Food bank services were put in place and other much needed health supports were reinstated.

Bed Bug Control Service Levels (May 1, 2011 to December 31, 2011):

- Assessed 4146 units (includes initial inspections and resulting block inspections);
- 978 units had bed bugs (each unit required further investigation);
- Assisted and coordinated 175 extreme cleaning/unit preparation for vulnerable clients to maximize the success of pest control treatment;
- 59 referrals to PHNs (each referral representing one or more vulnerable clients);
- 1248 bed bug service requests from the public (see Attachment 1 for a map by City Ward);
- 66 bed bug awareness and educational presentations provided (approximately 1960 people reached).

Surveillance and Reporting Requirements:

As a condition of the provincial funding, TPH is required to collect data on the degree and severity of bed bug infestations and the populations and settings most impacted. The province has established surveillance and evaluation reporting templates.

To prepare these reports, TPH is seeking input from key City partners on specific bed bug activities associated with the 2011 provincial funding enhancements. This includes input from SSHA and TCHC, as well as the TBBWG.

As part of City Council's approval of the provincial funding in 2011, direction was given to the Medical Officer of Health to work with the City Manager to establish performance measures and report to City Council on a bi-annual basis, through the Board of Health, on effectiveness and results of the bed bug control initiative.

It must be noted that 2011 is the first year of significant, dedicated municipal and provincial funding, and the first year of TPH's Bed Bug Team. Given the scale and complexity of the problem it is difficult to achieve a measurable decrease in bed bug infestations city-wide by March 31, 2012. On-going provincial funding over time is needed to continue to achieve measurable control of infestation across the City, and particularly among the City's most vulnerable populations.

Toronto Public Health, in partnership with other City Divisions and the community, has been proactive in addressing bed bug infestations. In particular, the work of the TPH Bed Bug Team and the members of the TBBWG have provided the infrastructure necessary to take an integrated and informed approach to bed bug control.

CONCLUSION

Toronto Public Health has informed the Ministry of Health and Long-Term Care of the resource demand, client needs and financial requirements for effective continuing bed bug control activities.

In view of 2012 operating budget reductions, Toronto Public Health's leadership role and key service provision in bed bug control is limited to that which can be supported by the dedicated provincial and municipal funding.

Without ongoing funding, current bed bug service levels are not sustainable after March 31, 2012. Toronto Public Health will continue its efforts to secure sustainable funding for 2012. Support for dedicated ongoing provincial funding beyond this date is requested from the Board of Health and City Council.

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SIGNATURE

Dr. David McKeown
Medical Officer of Health

ATTACHMENTS

Attachment 1: Map of Requests for Service by Ward: May 1– December 31, 2011