SUMMARY

Toronto Public Health (TPH) has been involved in supporting bed bug control activities since 2005. During the period May 1, 2011, to March 31, 2012, a dedicated multi-disciplinary team realized substantial service accomplishments. This new approach was the result of provincial funding received after extensive advocacy over the past few years.

As the City of Toronto’s lead for the 2011-12 Bed Bug Control Strategy, TPH received time-limited funding from the Province of Ontario to deliver on a comprehensive bed bug control mandate which includes supporting the City’s most vulnerable residents who lack the financial resources and/or face physical or mental challenges affecting their ability to address infestations and prevent reoccurrence.

In 2011-12, bed bug control activities led by the team included: prevention, identification, inspection and assessment, and extreme cleaning and unit preparation for treatment of bed bug infestations, as well as comprehensive nursing assessment, health services referral and supports for those clients with multiple health issues and who lack basic necessities. TPH also supported other key City partners with implementing bed bug control activities within their respective jurisdictions, including Toronto Community Housing Corporation (TCHC) and Shelter Support and Housing Administration (SSHA).

With the exception of on-going provincial funding for three public health nurses, all funding received by TPH in 2011 was only one-time funding and expired on March 31, 2012. This includes the $1,216,518 in provincial funding allocated to various control activities (e.g., inspection, assessment, extreme cleaning), supplies and equipment (e.g., vacuums, bedding encasements, replacement beds), and for the staffing costs related to six public health inspectors and a manager who work with the three public health nurses as an integrated response team.
The one-time provincial funding ended March 31, 2012, as previously highlighted to the Board of Health (BOH) in a series of TPH staff reports throughout 2011 and 2012. To date, the Ministry of Health and Long-Term Care has not yet formally communicated a commitment to funding all components of the bed bug control strategy. Without an ongoing provincial funding commitment, the operational and human resources required to meet the basic demands for service will be significantly impacted, and the core services including comprehensive assessments, block inspections and extreme cleaning and unit preparation will cease. This is consistent with the Board of Health’s January 20, 2012, direction to the Medical Officer of Health to provide Toronto Public Health’s bed bug control strategy services in accordance with approved dedicated provincial and municipal funding in 2012. This report provides an update on TPH Bed Bug control activities to March 31, 2012 and service levels for the balance of 2012 in light of the end of one-time provincial funding.

In addition, this report, in consultation with Municipal Licensing and Standards, Legal Services and TCHC, responds to directions from the January 20, 2012 BOH meeting; and the February 6 and 7, 2012 City Council meeting.

**Financial Impact**

There are no financial implications arising from this report.

**DECISION HISTORY**

There is a history of reports, decisions and recommendations made by the BOH 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, especially the City’s most vulnerable populations.

City Council received the most recent written TPH staff report on February 6 and 7, 2012, and unanimously voted to request the Ministry of Health and Long-Term Care to provide a clear commitment to ongoing base funding for all components of the bed bug control strategy, effective April 1, 2012. A copy of this decision was sent on February 7, 2012. City Council reaffirmed this position on April 12, 2012.

**Background Information**

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

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

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

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

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

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

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 tend to face a disproportionate share of the burden of untreated bed bug infestations. The City's most vulnerable residents lack the financial resources and/or face reduced physical or mental capacities resulting in decreased ability to appropriately and fully address infestations and prevent reoccurrence without assistance.

Both TPH and the City of Toronto 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 one-time provincial funding offered by the Province. In September 2011, City Council approved the receipt of the provincial one-time funding ($1,216,518 gross/$0.00 net) from April 1, 2011 – March 31, 2012; as well as the receipt of funding, through the Nursing Secretariat, for three permanent public health nurses to be dedicated to bed bug control activities.

Despite letters of support for continued provincial funding, which have been sent to the Minister of Health and Long-Term Care from key stakeholders, community groups, health care providers, tenant associations, and other City Departments including the City Manager, and TCHC throughout March and early April, 2012, ongoing provincial funding has not been announced. In addition, Woodgreen Community Centre held a press conference at City Hall on March 23, 2012, calling on the provincial government to provide continued funding for the TPH Bed Bug team, in order to support infestation control activities for the City's most vulnerable populations.

At its February 6 and 7, 2012 meeting, City Council unanimously voted to request the Ministry of Health and Long-Term Care to provide a clear commitment to ongoing base funding for all components of the bed bug control strategy effective April 1, 2012. A copy of this decision was sent to the Ministry of Health and Long-Term Care on February 7, 2012. City Council reaffirmed this vote on April 12, 2012.

To date, TPH has not received a response from the Ministry of Health and Long-Term Care regarding continued provincial funding in 2012. Bed bug service levels provided in 2011 are not sustainable without dedicated provincial funding. Toronto Public Health's
leadership role and key service provision in bed bug control will be limited to that which can be supported by the existing TPH budget, in accordance with direction provided by the BOH, Budget Committee, Executive Committee and City Council in previous staff reports.

**COMMENTS**

Toronto Public Health currently 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 (disabilities) and mental health issues, in addition to lacking basic necessities (basic financial resources, food and clothing).

The province has committed to ongoing 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 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 extreme cleaning and furniture replacement where necessary. The provincial one-time funding covered the costs of these temporary positions.

**Bed Bug Team Activities**

Attachment 2 depicts the activities of the Bed Bug Team for the period May 1, 2011 to March 31, 2012. Of the 181 extreme cleaning/unit preparations, 87.3% were in properties that had only 1 or 2 extreme cleanings during this period. The dominant picture is that bed bug infestations continue to be an issue in a variety of multi-residential settings across the City (see Attachment 1).

**Bed Bug Surveillance**

2011 was the first year of dedicated bed bug funding and the first year of Toronto Public Health's Bed Bug Team. Given the scale and complexity of the issue in Toronto, and the lack of widely accepted surveillance measures, it is difficult to demonstrate a measurable change in bed bug infestations. Ongoing provincial funding over a longer period is needed to continue the work of controlling infestations across the City, particularly among the City's most vulnerable populations, and to develop robust surveillance measures.

The data that is currently tracked in the Toronto Healthy Environments Information System (THEIS) is the number of bed bug-related calls. Enhancements to the system to provide a further breakdown require additional time and resources and will be addressed
in the event of receipt of ongoing funding. For the purposes of reporting to the Board of Health and the Province, additional information was gleaned from manual tracking forms, field notes and file documentation. Data on vulnerable clients is tracked in the Toronto Community Health Information System (TCHIS).

**Service Level Reductions with the Reduction of Provincial Funding:**
The loss of dedicated provincial funding will result in a significant reduction in service levels. The staffing complement for bed bugs will be reduced to one Public Health Inspector/Bed Bug Specialist and three PHNs. PHNs and PHIs have worked collaboratively to deal with infestations and eliminating this collaborative approach with the reduction of PHIs plus the material resource reduction (monies for extreme cleaning and unit preparation) will greatly limit the ability of the team to work effectively with vulnerable clients who are experiencing infestations. Clients who are infested and vulnerable and cannot independently deal with infestations may develop into source cases and result in infestations for other clients.

From May 1, 2011 to March 31, 2012, TPH assisted 181 vulnerable clients who had bed bug infestations. With one PHI Bed Bug Specialist available, the number of vulnerable clients that will be annually assisted will be reduced to approximately 30. As of April 13, 2012, there were 16 clients on a waiting list for extreme cleaning. Extreme cleaning costs vary but average approximately $1000 per event. Despite having PHN staff to assist the client to comply with landlord requirements and prepare for the cleaning, without the extreme cleaning funds, intervention is not feasible. Other home care services for the client may be restricted because of the infestation. Furthermore vulnerable clients will be unable to stay in their homes because of their health issues. This will cause costly emergency referrals to hospitals, shelters, and Long Term Care. There will be an increase in referrals to other parts of the health care system which is contrary to the provincial Aging at Home strategy.

The following chart provides a summary of the services that are currently being provided, and the service levels that will be provided after the reduction of funding and staffing for the Bed Bug Team – it also lists services that will no longer be provided.
<table>
<thead>
<tr>
<th>Current Services</th>
<th>New Service Levels</th>
<th>Services that will no longer be provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field inspections/unit assessments</td>
<td>Unit assessments limited to individualized tenant bed bug complaints involving a vulnerable client</td>
<td>Field inspections/unit assessments in response to all bed bug complaints.</td>
</tr>
<tr>
<td>Insect identifications in response to public concerns.</td>
<td>Directing complainants to the provincial website</td>
<td>Insect identifications.</td>
</tr>
<tr>
<td>Thorough investigations through block inspections.</td>
<td>None</td>
<td>Thorough investigations through block inspections.</td>
</tr>
<tr>
<td>Extreme cleaning/unit preparation for vulnerable clients.</td>
<td>None</td>
<td>Extreme cleaning/unit preparation for vulnerable clients.</td>
</tr>
<tr>
<td>Comprehensive education to advise and guide landlord/tenants groups dealing with bed bugs.</td>
<td>None</td>
<td>Comprehensive education to advise and guide landlord/tenants groups dealing with bed bugs.</td>
</tr>
<tr>
<td>Respond to all requests for general education regarding bed bugs.</td>
<td>Limited response to requests for awareness and prevention education by PHNs.</td>
<td>Response to all requests for general education.</td>
</tr>
<tr>
<td>Management of vulnerable client health issues including access to food, clothing, housing, activities of daily living, mental health issues and access to community supports and health services.</td>
<td>Manage client health issues including access to food, clothing, housing, activities of daily living, mental health issues and access to community supports and health services.</td>
<td></td>
</tr>
<tr>
<td>Coordinate services with CCAC and other service providers to provide required supports for vulnerable clients.</td>
<td>PHNs will continue to work with CCAC to obtain required supports for vulnerable clients. PHNs will try to work with landlords to support a pest-free environment (landlord mandate) however without the preparation work and extreme cleaning, infestations will continue and community supports will not provide service in infested units.</td>
<td>Service will be provided but dependent on ability to prepare and clean the unit.</td>
</tr>
<tr>
<td>Development of a dedicated tracking system.</td>
<td>Documentation and tracking will be limited to PHN work with vulnerable clients (TCHIS). This system does not support a bed bug surveillance system.</td>
<td>Development of a dedicated tracking system.</td>
</tr>
<tr>
<td>Procurement and provision of additional supplies for vulnerable clients (e.g. bed bug proof pillows, mattress encasements, bedding, beds, vacuum cleaners, medical supplies)</td>
<td>No further procurement as a result of lack of funding. Limited supply of in stock items to clients while supplies last and only if the units have been deemed insect-free. Since PHNs are not trained to confer a pest free environment, PHN services will be curtailed.</td>
<td>Procurement and provision of additional client supplies.</td>
</tr>
<tr>
<td>Financial support and specialized training to social housing providers, including shelters.</td>
<td>PHN can provide some education support to providers.</td>
<td>Financial support and specialized training to social housing providers, including shelters.</td>
</tr>
<tr>
<td>Proactive outreach initiatives (nursing homes, rooming houses, group homes).</td>
<td>Services will be responsive in nature.</td>
<td>Proactive outreach initiatives (nursing homes, rooming houses, group homes).</td>
</tr>
<tr>
<td>Intervention services between landlords and tenants to resolve infestation issues.</td>
<td>Limited response without PHI involvement. PHN will continue to assist tenant to comply but success will be limited given elimination of support services such as extreme cleaning.</td>
<td>Intervention services between landlords and tenants to resolve infestation issues.</td>
</tr>
</tbody>
</table>
The following are updates on directions made at the January 20, 2012 BOH meeting and February 6 and 7, 2012 City Council meeting:

**Landlord Regulation and Enforcement**
The Board of Health asked if any changes are required to regulation or by-laws, policy or procedures, to provide authority to Toronto Public Health or City of Toronto Municipal Licensing and Standards, to undertake or contract for necessary bed bug treatment and apply costs to the property taxes of landlords who fail to properly respond to bed bug infestations within their buildings. No changes are required as authority already exists for both Toronto Public Health, and Toronto Municipal Licensing and Standards to intervene and apply costs to the property taxes of landlords.

**Current protocols and levels of compliance for Bed Bug Control from Toronto Community Housing Corporation and other multi-residential landlords**
The Medical Officer of Health was asked to provide the Board of Health with copies of current protocols for Bed Bug Control from Toronto Community Housing Corporation and other multi-residential landlords, and levels of compliance with following protocols.

The Greater Toronto Apartment Association (GTAA) responded to Toronto Public Health's request for current protocols and levels of compliance for Bed Bug Control by providing seven samples from their member multi-residential landlords. An example is included as Attachment 3. While there is no systematic assessment of compliance, the GTAA reports that there is no benefit in delaying treatment for bed bugs as delay only exacerbates the situation. Compliance is in their best interest. As a result of this request for information, the GTAA will be developing a GTAA Bed Bug Control Protocol template by the end of May 2012 for use by all of its members.

Toronto Community Housing Corporation states that pest management continues to be a challenging but essential component of managing their buildings. Attachment 4 is comprised of preparation and treatment protocols as set out through the SPMAO (Structural Pest Management Association of Ontario) and best management practices for bed bug control as set out by the National Pest Management Association. TCHC has informed TPH that these serve as the template of the pest management program at Toronto Community Housing. TCHC works with tenants, staff and vendors to educate and strive for full compliance of these standards and practices.

Measuring compliance and success is a priority of Toronto Community Housing and they are currently working with internal resources and vendors to build mechanisms and resources to monitor/track compliance and successes going forward.

**Multi-Residential Apartment Building Audit and Enforcement Program Update:**
The following update was provided by Municipal Licensing and Standards on the work of the Multi-residential Apartment Building (MRAB) Audit and Enforcement Program in regard to bed bug cases and control.

The Multi-Residential Apartment Building (MRAB) Audit Program was launched in December 2008 with the primary goal to audit the rental housing stock across the City of
Toronto. With a focus on buildings containing more than six residential rental units, the program objectives encompass inspections of the common elements in these buildings and encouraging landlords to make repairs that would stall the decay of the housing stock. In addition, the program integrated efforts to reach tenants, provide information and receive complaints by providing an onsite mobile office throughout the duration of the audit.

At each audit, staff attend floor-by-floor to knock on doors in the building. Where tenants answer, an explanation of the audit program is provided and a series of questions are asked including infestation concerns, including but not limited to bedbugs. Where tenants confirm a bed bug infestation, a referral is made to Toronto Public Health as part of an established collaborative plan.

Municipal Licensing and Standards completed 655 audits by April 13, 2012 and continues to audit buildings.

**Public Reporting Matrix/Database:**
The Medical Officer of Health was asked by City Council to report on the feasibility, implications and benefits of creating a publicly-accessible database that will be hosted on the City of Toronto website that tracks and monitors bed bug infestations with mapping tools. The Board of Health also requested a report on a matrix for levels of infection and a threshold whereby public reporting would be triggered.

A publicly accessible website disclosing the location of bedbug infestations is technically feasible. However, development would require new resources and there are reasons to be covered about its effectiveness.

In the absence of mandatory reporting, there is an inherent dependence on voluntary reporting. Making the location of the infestations public could drive the issue underground and create a barrier to voluntary reporting. There is also the risk of unintended consequences such as putting vulnerable clients at greater risk of eviction. Currently, landlords have been reporting such cases to the Bed Bug Team with the objective of assisting the vulnerable client in successful tenancy.

Other questions to be considered in the design of a public database include:

- Would the publicly accessible database include private residences where bed bug infestations have been confirmed or only public/commercial premises?
- Would an address with several units be listed even though only one unit might be affected?
- Would specific units in multi occupancy residences be identified?
- How frequently would the database be updated?
- How long after an infestation would premises be listed on the database?

City Legal has expressed concern about privacy issues and suggests a privacy impact assessment may be required as part of any initiative of this type.
Options and opportunities to improve and sustain a coordinated management approach to bed bug control and response activities

Toronto Public Health continues to work with the Bed Bug Working Group headed by Deputy City Manager Brenda Patterson and with the Toronto Multi-jurisdictional Enforcement Team to explore options and opportunities to maximize co-ordination of bed bug control and response activities in the City of Toronto.

Meeting with the Province's Minister of Health and Long-Term Care and Chief Medical Officer of Health on issues of bed bug infestations

Plans for this meeting have been initiated by Toronto Public Health.

CONCLUSION

The anticipated reduction in dedicated provincial funding will lead to a reduction in bedbug services by TPH. As outlined in this report, a service level reduction plan has been prepared and certain services (extreme cleaning and unit preparation) have already ceased. We anticipate full service reductions to be in place by May 14, 2012.

CONTACT

Tracy Leach
Manager, Healthy Environments
Tel: 416-338-8035
E-mail: tleach@toronto.ca

Ron de Burger
Director, Healthy Environments
Tel: 416-338-7953
E-mail: rdeburg@toronto.ca

SIGNATURE

Dr. David McKeown
Medical Officer of Health

ATTACHMENTS

Attachment 1: Bed Bug Service Requests by Ward (Map) - May 1, 2011– Mar. 31, 2012
Attachment 2: Bed Bug Team Activities (May 1, 2011 to March 31, 2012)
Attachment 3: GTAA Bed Bug Control Protocol
Attachment 4: Documents submitted by Toronto Community Housing Corporation (Bed Bug Committee – Treatment Protocols, Bed Bug Treatment Preparation Form, and Best Management Practices for Bed Bugs)