Hamilton's Community Bed Bug Strategy

2016-2019

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1.0 Summary

The City of Hamilton recognizes that safe and affordable housing is a basic human need and is the foundation for the economic, social and physical well-being of residents. Bed bugs can have a negative impact on an individual's health and well-being from both a mental and physical perspective. Bed bugs can directly affect a person's quality of life including how they build their lives, nurture their families, and engage in the community. Some impacts of bed bugs may include sleep disturbances, anxiety, stress, depression, and allergic reactions.

Bed bugs have become a persistent problem for many cities in all parts of the world, including Ontario. Unfortunately, bed bugs are a problem for many residents in Hamilton. The magnitude of the bed bug problem in Hamilton has grown exponentially with an increase in complaints made by landlords and tenants growing from 38 in 2006 to 456 in 2014 (Public Health Complaints Data Base System). Given this growth, the City's ability to achieve control of bed bug infestations has become increasingly challenging. City staff are spending more time seeking support, cooperation, collaboration, and coordination among tenants, landlords, pest control companies, and other supporting agencies to address the growing issue of bed bugs.

This is the first Community Bed Bug Strategy for Hamilton. The Strategy marks a significant milestone for our community to achieve the City's vision for a vibrant, healthy, and sustainable city. There is currently no coordinated response to manage bed bug infestations in Hamilton. Small pockets of time-limited funding and projects have proven to be unsuccessful at providing the physical and financial supports that the community needs to respond to this growing problem. Hamilton's Community Bed Bug Strategy will look to the federal, provincial and local governments, as well as community agencies, residents and businesses, to respond with a collective approach to managing bed bugs in Hamilton.

Hamilton's Community Bed Bug Strategy was developed in response to a request by City Council to address resident concerns regarding bed bug infestations. As the bed bug problem has worsened, the City and the local community have adapted their approaches to bed bugs. There are local strengths on which to build the Strategy including City and community bed bug services, public outreach and education sessions provided by Public Health,

laundering facilities and thermal treatment for household belongings at Good Shepherd Works and many more. Additional details on current local supports are available in Section 5.0. Community Profile.

The Strategy is a three year plan (2016-2019) and was developed in collaboration between the City and community agencies, in close consultation with people that live with bed bugs, and with people that work in higher risk occupations for exposure to bed bugs. There are significant barriers that stand in the way of managing bed bug infestations. In many conversations, residents courageously shared their personal experiences and the effect that bed bugs have had on their quality of life. Hamilton residents are calling for the City to be a leader in providing an effective and coordinated response to the management of bed bugs while maintaining the dignity of the people who are experiencing them. The Strategy is informed by conversations with the community about the best way to respond to bed bugs. More than 150 people were consulted in the development of the Strategy. Additional details about the consultation process are provided in Schedule C of Appendix "A" to Report BOD14010(a)/CES14013(a).

The Strategy aims to support residents, landlords, communities, and workers to reduce the impact that bed bugs have on those who experience them. It strives to reverse the growing trend of infestations in Hamilton. The Strategy recognizes that the city-wide elimination of bed bugs is unlikely, but there are steps that can be taken to reduce exposure to and minimize the effects of bed bugs. Research suggests that an effective bed bug strategy is comprehensive and includes the promotion of bed bug education and training to prevent further spreading of the problem and encourage early identification.

The goals of the Bed Bug Strategy are to:

- 1) Minimize movement of bed bugs to new locations;
- Identify and significantly reduce infestations that can serve as reservoirs for spreading bed bugs; and
- 3) Create living, work and community spaces that are less receptive to bed bug infestations¹.

 $^{^{1}}$ Adopted from the Collaborative Strategy on Bed Bugs, 2015 prepared by the Federal Bed Bug Workgroup.

The Strategy has six priority areas that are further divided into twelve recommended activities, with three of these considered critical investment activities needed to respond to these priority areas.

- i) Direct Assistance for Residents, in particular vulnerable populations;
- ii) Workplace Training and Policy;
- iii) Public Education and Prevention;
- iv) Integrated Pest Management;
- v) Monitoring and Evaluation;
- vi) Support and Advocacy

It will take three years to implement all of the recommendations in the Strategy, but there are activities that can be done in the short-term to improve the quality of life for those experiencing bed bugs while working towards reversing the trend of rising bed bug occurrences in Hamilton.

The Strategy recommends focusing on the following activities that are considered critical for effective implementation of the priority areas:

- (1) Create and administer a Bed Bug Assistance Program to provide direct and coordinated support to vulnerable residents with physical and practical assistance to help prepare homes for bed bug treatment (1.1).
- (2) Develop and implement a comprehensive health promotion campaign that includes core training modules and outreach for workplace training, policy development, public education and prevention (2.1), and
- (3) Invest in a City staff person to coordinate, implement and monitor the Strategy (6.1).

A comprehensive community bed bug response will require collective ownership between the federal and provincial governments, the City, and the community with a sustained financial commitment by government to achieve the goals of the Strategy.

A failure to act by government and the community would likely lead to an increase in bed bug infestations and the consequent impacts on individuals and the community are significant. The community is looking to the City to help support residents, particularly vulnerable populations with bed bug response. Other jurisdictions have not found success managing bed bugs. Hamilton has the opportunity to build from successful examples of local approaches that include an Integrated Pest Management approach. This approach would educate

the community about bed bugs, provide helpful tools for employers to train their staff about bed bug management, and promoting early identification practices so that infestations are prevented or controlled before they become significant and difficult to manage. These approaches are the best tools to reduce the impact of bed bugs across the community.

2.0 Introduction

Bed bug infestations are a problem experienced by many Hamilton residents. Steps to control bed bug infestations should be proactive, coordinated and immediate. While bed bugs do not appear to transfer infectious diseases to humans, there remains a significant social cost to infestations, including placing pressures on an individual that impact their health and well-being. The stigma, sleeplessness, stress and effort involved in dealing with bed bugs are considerable.

Controlling bed bugs can be very costly and is creating additional pressures on supports and services where resources are already limited. The financial burden of treating bed bug infestations and preparing one's home for bed bug remediation falls onto the tenant, the homeowner and the landlord. The cost of dealing with bed bugs is substantial and in turn reduces the capacity of housing providers to properly maintain their existing stock without passing on the costs to tenants or the public. It also impacts the financial capacity of both private and non-profit housing providers to develop more affordable housing.

2.1 Background

Hamilton's Community Bed Bug Strategy recommends better control methods for bed bug infestations and enhanced supports for people who are living with a bed bug infestation in their home, especially vulnerable people. Some people's ability to cope with a bed bug infestation is compromised by factors such as a low income, physical frailty and disabilities, mental health issues, and where English is not their first language.

The Hamilton community is challenged to control bed bug infestations effectively. Despite one-time provincial funding from 2011-2012, actions to combat bed bugs have not been sufficient to slow or reverse the trend of resurgence of bed bugs, which began in Hamilton in 2006. In 2013 and 2014 Hamilton City Council

approved funding for efforts to improve the local bed bug response with much of the efforts designed to support vulnerable residents through pilot programs.

Alignment: Hamilton's Community Bed Bug Strategy aligns to a number of City of Hamilton Directions and Board of Health Recommendations, including:

2012-2015 Strategic Plan in Strategic Priority # 1: A Prosperous & Healthy Community to improve the health and well-being of residents and support the provision of quality, safe and suitable housing options for Hamiltonians.

The City's **10 year Housing and Homelessness Action Plan**. Endorsed by Council on December 11, 2013, the comprehensive Bed Bug Strategy addresses Outcome 4, Strategy 4.5 of the Action Plan to ensure that *people live in housing that is good quality, safe and suitable to their needs* by (4.5) developing and implementing a proactive and coordinated strategy to address bed bugs.

On March 26, 2014, the Board of Health approved recommendations in Report 14-002 directing the Public Health Department and Housing Services Division to develop a Comprehensive Community Bed Bug Strategy. Development of the Strategy was guided by Hamilton's Bed Bug Action Group (BBAG) that formed in 2010 in response to Hamilton's concern about growing bed bug infestations and informed by a number of community sectors and City departments. A list of BBAG membership is included in Schedule B of Appendix "A" to Report BOD14010(a)/CES14013(a).

In 2011, Hamilton Public Health Services (PHS) received one-time funding from the Ontario Ministry of Health and Long-Term Care (MOHLTC) to be spent on bed bug education and outreach.

In 2013, \$350,000 in capital funding was approved by City Council for Housing Services Division staff to address bed bug issues in social housing and Residential Care Facilities. In 2014, Council approved the reallocation of the funding as follows:

- \$100,000 to develop the bed bug strategy;
- \$100,000 to pilot a unit preparation service for low income, vulnerable residents; and

- \$150,000 to implement best practices for bed bug remediation at Residential Care Facilities in the Domiciliary Hostel Program.
- Additional one-time funding was used by PHS to support vulnerable residents by creating a bed bug navigator.

2.2 Why are bed bugs back?

Bed bugs are in many cases a secondary symptom of already existing complex issues. Controlling bed bugs successfully will be difficult for many people unless primary issues such as poverty, physical and mental health, housing stability and homelessness are considered.

With global travel and limits on pesticides, bed bugs have spread to just about every city in the world. The fear of being blamed for a bed bug infestation can prevent some people from reporting bed bugs in their home or apartment, which would only make the problem worse.

Bed bugs have an easier time spreading in multi-unit dwellings and in Hamilton the percentage of multi-unit dwellings contributes to difficulties with controlling infestations. According to the 2006 Census, 25.8% of housing in Hamilton is comprised of apartment buildings, including low and high rise. A further 29.4% of housing options are attached to one or more units. Hamilton also has a slightly higher percentage of renters than the provincial average (28%). In Hamilton, 32% of the housing market is comprised of renters (City of Hamilton; 2006 Census).

Infestations in multi-unit dwellings can easily spread to adjacent units or throughout a building, substantially increasing costs to control the problem. It is important for effective control that stakeholders work together and establish proactive treatment plans based on best practices for bed bug control. Without these in place bed bug infestations will continue to spread.

That being said, bed bugs are not limited to where people live. Bed bugs can be found in a variety of work, community, and institutional settings. While bed bugs prefer to be where people sleep, places where people work and play may also act as transfer grounds for bed bugs to hitchhike between people's belongings.

2.3 What is a Bed Bug?

Bed bugs are small, wingless insects (about the size of an apple seed) with ovalshaped bodies. Bed bugs grow from 5 to 6 millimeters to 10 millimeters when fed. They usually bite at night. It is possible for anyone, anywhere to experience a bed bug infestation, but bed bugs can be prevented and controlled. Rather than placing blame, it is important to take action. If all residents and the community can do their part to prevent, identify and act this pest can be controlled.

The average bed bug lifecycle, starting from an egg, takes four to five weeks under good conditions. After an egg hatches there are five development stages of the nymph (instars) each requiring one full blood-meal to develop into the next stage. Feeding takes up to 15 minutes and is repeated every three days throughout the typical 6 to 12 month lifespan. Female bed bugs may lay up to 500 eggs in a lifetime. An adult bed bug can survive for over a year without feeding (Ter Poorten and Prose 2005; Durham Region 2012).

When not feeding, bed bugs hide in dark, dry places including in beds, mattresses, cracks in walls, floors and furniture. They can move up to 20 feet between feedings and finding rest (Kolb et al. 2009; Durham Region 2012). The reason bed bugs prefer humans is because they sense and seek warm-blooded hosts and can perceive body temperature changes and detect the emission of carbon dioxide and prefer exposed skin (Ter Poorten and Prose 2005; Durham 2012).

2.4 Integrated Pest Management (IPM) for Managing Bed Bugs

Integrated Pest Management (IPM) is considered the most effective approach to eliminating bed bugs. IPM follows a logical combination of steps and requires collaboration between stakeholders to make good decisions about managing bed bugs. IPM recognizes that there are different roles and responsibilities for stakeholders, including tenants, landlords, the pest control industry, government and community.

Hamilton's Bed Bug Guidelines (Schedule A of Appendix "A" to Report BOD14010(a)/CES14013(a)) identifies five components for a successful Integrated Pest Management program for managing bed bugs. These include;

- 1) Planning
- 2) Prevention
- 3) Identification and Keeping Records
- 4) Preparation and Treatment
- 5) Evaluation

The Government of Ontario approaches bed bugs with a focus to prevent, identify, and act.

Prevent:

The cleanest spaces have bed bugs, but there are things that can be done to help prevent infestations from occurring. Knowing what bed bugs look like and where they prefer to hide so they are discovered at an early stage is key to preventing bed bugs, this includes limiting or removing hiding places.

Identify:

One of the best ways to control a bed bug infestation is to spot the problem early and act quickly. Having accurate information about what a bed bug looks like, including signs and symptoms of bed bugs and who to contact if an infestation is suspected will help reduce the likelihood that they will spread to other areas.

Act:

After bed bugs are suspected, the presence of bed bugs should immediately be reported in writing to a property manager or pest management company. In all cases, an assessment should be arranged by the landlord to confirm the infestation, followed by providing information to tenants about how to prepare for treatment.

Preparation and treatment for bed bugs are complex and require physical and mental resiliency. Instructions for preparation include steps that need to be taken prior to bed bug treatment including activities such as laundering clothing and bedding, reducing clutter, vacuuming the area, and sealing voids or cracks in crevices between baseboards or on furniture. Options for treatment services may include steam or heat treatment, followed by the option of chemical remediation by a licensed pest control company as needed. A good practice for bed bug control is a combination of treatment options (called Integrated Pest Management) over two or three treatment visits. If a property manager or pest management company does not respond appropriately to a tenant's bed bug complaint, City staff can be contacted at 905-546-CITY to address the complaint under Section 26 (Pests) of the Property Standards by-law, 10-221.

2.5 Health & Social Impacts

While not a public health hazard, bed bugs remain a significant public health concern according to the World Health Organization (Harlen et al., 2008). Bed bugs are not known to transmit disease to humans; however they may impact quality of life through secondary infection at a feeding sites, itchiness, or mental anguish.

Vulnerable populations disproportionately share a larger burden of the adverse effects of bed bugs. While bed bugs can happen to anyone, anywhere, at any time, the ability to respond to bed bugs is impacted by an individual's personal abilities and financial resources. People who experience poverty, physical or mental health challenges, housing instability or homelessness, or a combination of health symptoms are often most impacted by bed bugs. The social stigma associated with bed bugs and the costs of eliminating an infestation add further to the psychosocial stress involved in controlling infestations.

2.6 Who is Responsible for Bed Bugs?

Responsibility for treating bed bugs ultimately falls onto the property owner, including landlords of rental properties (Residential Tenancies Act, 2006). The landlord's cooperation with tenants is important since the tenant is responsible for unit preparation, a key step in reducing bed bugs. In Hamilton, there are a number of stakeholders who play a role in addressing bed bugs through direct services provided by the City (Public Health Services, Community and Emergency Services and Public Works). Stakeholders in the community include service providers (such as Good Shepherd, Housing Help Centre, Catholic Family Services) that offer direct and indirect services to residents in the home or in the community, the pest control industry, social and private rental housing providers, university and college living facilities, local associations (such as the Hamilton District Apartment Association), and institutional settings such as hospitals, long-term care facilities, and emergency shelters.

Details on stakeholder's roles and responsibilities are available in Schedule A of Appendix "A' to Report BOD14010(a)/CES14013(a).

2.7 Legislation and Enforcement

Local By-law

The City of Hamilton Property Standards By-Law No. 10-221 provides Municipal Law Enforcement with the authority to enforce property standards and designates Public Health Inspectors to specifically enforce the pest section of the by-law. Section 26 of the by-law states that the owner of a property must keep the property free of pests. In the case of bed bugs, an infestation refers to more than one bed bug.

Provincial Act

The Residential Tenancies Act, 2006 (RTA) is a Provincial Act that does not deal with bed bugs directly, but has the tools required to deal with issues through the

Landlord and Tenant Board. The RTA outlines specific rights and responsibilities for residential landlords and tenants and sets out a process for how these can be enforced. This Act is not enforced by the City of Hamilton. Cases are instead brought forward by landlords or tenants to the Landlord and Tenant Board.

The Landlord's responsibilities include:

- 1. Landlord's responsibility to repair (section 20 (1 & 2)).
- 2. Landlords right to entry with notice (section 27).

The Tenant is responsible for ordinary cleanliness of the rental unit, except to the extent that the tenancy agreement requires the landlord to clean it (RTA 2006, c. 17, s 33). The tenant's responsibility for bed bug preparation should involve preparing the unit for treatment by removing clutter, arranging furniture as needed away from walls, vacuuming, and laundering clothing.

According to the RTA, landlords have a certain responsibility to respond to bed bugs based on the responsibility to repair and maintain rental units. To do this, landlords have a right of entry with notice, which includes an inspection, or to carry out treatment or repair.

Human Rights Code and Accommodation

Many complaints of bed bugs involve compulsive hoarding or barriers such as disability. The Human Rights Code permits tenants to request additional supports from the landlord in principle of accommodation based on a disability. A landlord must provide evidence of how they met the request for accommodation, particularly in circumstances where the landlord is seeking to terminate a tenancy based on a failure to cooperate on the part of the tenant.

Pesticide Use

Pesticides are regulated in Ontario by the Ministry of Environment and Climate Change and nationally by the Pest Management Regulatory Agency (PMRA), Health Canada. The PMRA monitors safety incidents related to the control of bed bugs and accepts compliance and enforcement actions where necessary. The Ministry of the Environment and Climate Change issues licenses to pest management companies to operate in Ontario using regulated pest control products that the general public does not have access to.

A pesticide product must be registered under the federal *Pest Control*

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Products Act (administered by Health Canada's PMRA) and is classified by the Ministry of the Environment and Climate Change (MOECC) under the Pesticides Act and Ontario Regulation 63/09 for legal sale and use in Ontario.				
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3.0 Strategy Overview

3.1 Aspiration Statement:

To be a City where people live, work and play free of bed bugs.

3.2 Mission:

To build a prosperous and healthy community to improve the health and well-being of residents and support the provision of quality, safe and suitable housing options for Hamiltonians (2010-2015 Strategic Plan).

3.3 Goal:

Hamilton's Community Bed Bug Strategy is a coordinated approach to address bed bugs in Hamilton.

The long-term goals of the Strategy are to;

- 1) Minimize the movement of bed bugs from place to place;
- 2) Identify and reduce significant infestations that can serve as reservoirs for spreading bed bugs; and,
- 3) Create living, work and community spaces that are less receptive to bed bug infestations

3.4 Priority Areas:

The priority areas have been shaped by several community-wide processes through consultation and evaluation. These Hamilton-focused strategic priority areas form the basis of recommended activities on how the City and community should respond to bed bugs.

The Strategy recommends focusing on the following priority areas;

- i) Direct Assistance for Residents, in particular vulnerable populations;
- ii) Workplace Training and Policy;
- iii) Public Education and Prevention;
- iv) Integrated Pest Management;
- v) Monitoring and Evaluation;
- vi) Support and Advocacy

3.5 Bed Bug Strategy at a Glance

Hamilton's Community Bed Bug Strategy at a Glance

ASPIRATION

To be a City where people live, work and play free of bed bugs.

MISSION

To build a prosperous and healthy community to improve the health and well-being of residents and support the provision of quality, safe and suitable housing options for Hamiltonians.

GOALS

Minimize movement of bed bugs from place to place

Identify and reduce significant infestations that can serve as reservoirs for spreading bed bugs

Create living, work and community spaces that are less receptive to bed bug infestations

PRIORITY AREAS

Direct
Assistance for
Vulnerable
Residents

Workplace Training and Policy

Public Education and Prevention

Integrated Pest Management Monitoring and Evaluation

Support and Advocacy

4.0 Strategic Plan

Priority Area 1

Direct Assistance for Residents, in particular vulnerable populations.

Navigating supports when dealing with bed bugs is challenging. How residents are supported directly impacts a person's ability to respond to bed bugs. In many cases, physical and financial assistance is required to address bed bugs and other complex issues, such as poverty, mental and physical disability, housing instability, etc. Responding to the root causes of bed bugs with appropriate services is as important as how we respond to bed bugs.

RECOMMENDED ACTIVITIES



- 1.1 Develop a Bed Bug Assistance Program for vulnerable residents that offer preparation and practical assistance.
- 1.2 Ensure appropriate services are available to prevent and respond to bed bugs.

PRIORITY AREA 2

Workplace Training and Policy.

Direct and indirect service workers play an important role in preventing the spread of bed bugs. Service workers may assist with early identification and provide support to residents while receiving bed bug treatment. Workplaces have a responsibility to develop policies that protect workers from acquiring bed bugs and enhancing procedures that create practices to limit the spread of bed bugs.

RECOMMENDED ACTIVITIES



- 2.1 Create and implement a comprehensive health promotion campaign to address workplace training, public education and prevention.
- 2.2 Adapt workplace policies to support employees and the community to respond to the unique challenges brought on by bed bugs.

PRIORITY AREA 3

Public Education and Prevention.

Research suggests that the primary factor for successful bed bug response plans is to incorporate broad education and prevention strategies that can enable residents to help change how we understand and respond to bed bugs. It is crucial that the stigma surrounding bed bugs be lifted for identification and response methods to be effective.

RECOMMENDED ACTIVITIES

- 3.1 Reduce stigma around bed bugs by supporting the development and implementation of a comprehensive health promotion campaign.
- 3.2 Promote the use of bed bug prevention tools and techniques to assist with prevention and early identification of infestations.

Priority Area 4

Integrated Pest Management.

Hamilton must keep current with technological advances for bed bug prevention and control; constantly adapting how to approach bed bugs based on evidence and proven technologies. The most effective response to managing bed bugs is the Integrated Pest Management (IPM) program which involves more than just treatment of existing infestations. An important factor in IPM is that treatment does not only include chemical options, but rather treatment includes ongoing maintenance of living, work and community spaces including vacuuming, cleaning, steaming, heat and cold treatments, and pesticide use as warranted. IPM provides a consistent approach for multi-unit dwellings to improve communication between tenants, landlords, home owners and service providers to develop expectations for treatment.

RECOMMENDED ACTIVITIES

- 4.1 Promote and implement Hamilton's Bed Bug Guidelines: An Integrated Pest Management Approach for Managing Bed Bugs.
- 4.2 Work with the community to develop a plan to respond to barriers faced by multi-unit dwellings, work and community spaces.

Priority Area 5

Monitoring and Evaluation.

It is critical that the magnitude of Hamilton's bed bug problem be understood and monitored. It is also important to be flexible throughout implementation of the Bed Bug Strategy, which includes having a plan for evaluation.

RECOMMENDED ACTIVITIES

- 5.1 Invest in and develop long-term surveillance methods to monitor bed bugs.
- 5.2 Develop an evaluation plan with key indicators to measure progress of the Bed Bug Strategy.

Priority Area 6

Support and Advocacy.

In an effort to create processes that are sustainable a comprehensive approach to address bed bugs is essential. It is also important that moving forward the Strategy seeks additional support from all levels of government, including support for implementation of the Bed Bug Strategy. There is substantial work to be done to respond to the priority areas of the Strategy, which includes advocating to governments to address root causes of bed bugs and adopt new funding approaches in response to the resurgence of bed bugs in Hamilton and beyond.

RECOMMENDED ACTIVITIES



- 6.1 Invest in project management support to implement and monitor the Bed Bug Strategy.
- 6.2 Advocate to all levels of government to improve response to bed bugs, including root causes of the bed bug resurgence.

Priority Area	Recommended Activities	Strategies	Starting Point Actions	Timing	Key Stakeholders
1. Direct Assistance for Residents, in particular vulnerable populations	 1.1. Develop a Bed Bug Assistance Program for vulnerable residents that offer preparation and practical assistance. 1.2. Ensure appropriate services are available to prevent and respond to bed bugs. 	 1.1.1. Support residents with bed bug preparation, including financial and physical assistance for preparation services such as laundry, cleaning and steam treatment of bed bug infested items; to acquire prevention tools, i.e., mattress and box spring encasements and interceptors (glue traps, moats); purchase replacement/preventative furniture after treatment; and navigational supports of services available to residents. 1.1.2. Facilitate bed bug outreach teams using an intensive case management system to provide assistance to vulnerable residents, including assistance with navigational support. 1.1.3. Promote a bed bug furniture bank, including a recycled furniture recovery program and assistance with replacement items after treatment. 1.2.1. Develop and share a directory of bed bug services and resources to increase peoples' understanding of how to get support if they need it and how to get help for someone else. 1.2.2. Facilitate a clothing share in transition homes, with improved access to laundering facilities. 1.2.3. Create and promote the shared use of bed bug inspection tool kits, including vacuum lending programs. 1.2.4. Request additional funding to sustain the Public Works Bed Bug Waste Bag Collection program and distribute to tenants, owners, landlords and property managers. 	 Secure new funding and/or reallocate funding (1.1.1, 1.1.2, 1.2.3, 1.2.4). Complete Pilot evaluations to inform needs of new programs (1.1.1, 1.1.2, 1.1.3). Complete the development of the directory of bed bug services (1.2.1). Conduct a scan of existing clothing share programs for transition homes and laundry capabilities (1.2.2). Create a pilot case for bed bug inspection tool kits (1.2.3). 	Start: Immediate Duration: Ongoing	City of Hamilton — Housing Services Division, Public Health Services, Public Works Department; Housing Help Centre, Good Shepherd Works, Unite Way, Explore partnerships with organizations to enhance service.
2. Workplace Training and Policy	 2.1. Create and implement a comprehensive health promotion campaign that addresses workplace training, public education and prevention. 2.2. Adapt workplace policies to support employees and the community to respond to the unique challenges brought on by bed bugs. 	 2.1.1. Develop training modules for a comprehensive health promotion campaign to improve bug training for direct/indirect service workers. 2.1.2. Implement training of core competencies for direct/indirect service workers and service providers in high risk settings to identify symptoms of bed bugs, while continuing to provide service and promoting steps for early identification whenever possible. 2.1.3. Promote and implement the City of Hamilton Bed Bug Policy and Bed Bug Guidelines. 2.2.1. Shift workplace policies and practices toward supporting employees and vulnerable populations who experience bed bugs. 2.2.2. Include bed bug infestations as a separate component of intake questionnaires to determine the need for bed bug supports. 2.2.3. Distribute desk side prompts and bedbugsinfo.ca resources to Ontario Works and ODSP caseworkers to encourage open communication about bed bugs with clients and among staff. 	Learn from the Summary of Public Health Nurse Navigator program to inform workplace training and requirements for delivering effective bed bug assistance (2.1.1, 2.1.2). Work with City staff to finalize Bed Bug Policy and Procedure (2.1.3). Continue to promote the Workplace YouTube video created by BBAG to dispel myths about bed bugs (2.1.2, 2.2.1). Share resources about bed bugs and supports with residents through caseworkers (2.2.2, 2.2.3).	Start: Immediate Duration: 2 Years	City of Hamilton – All departments; CCAC, Catholic Family Services, Red Cross, Hamilton Family Health Team, and other direct support agencies.

Priority Area	Recommended Activities	Strategies	Starting Point Actions	Timing	Key Stakeholders
3. Public Education and Prevention	3.1. Reduce stigma around bed bugs by supporting the development and implementation of a comprehensive health promotion campaign. 3.2. Promote the use of bed bug prevention tools and techniques to assist with prevention and early identification of infestations.	 3.1.1. Develop and implement a communication strategy to promote bed bug awareness. 3.1.2. Promote www.bedbugsinfo.ca resources and complement on a local website to increase awareness about bed bugs and dispel the myths to reduce stigma. 3.1.3. Increase people's understanding of how to recognize bed bug signs & symptoms, including the impacts that poverty, physical and mental health, and housing stability has on responding to bed bugs. 3.1.4. Fight stigma through various community conversations by including opportunities for promotion and prevention and to talk with people experiencing bed bugs. 3.2.1. Continue with the Bed Bug Action Group (BBAG) as a task force to promote bed bug prevention, and monitor and implement the Bed Bug Strategy. 3.2.2. Increase peoples' understanding of how to reduce bed bug exposure and improve their housing experience. 3.2.3. Encourage landlords to adapt tenancy agreements that include expectations about bed bugs, including excessive cluttering policies, and no-fault/no-blame policies. 3.2.4. Provide training to the public about housekeeping skills to increase active involvement in housekeeping and bed bug monitoring. 3.2.5. Share resources with the community to encourage bed bug resistant community spaces by making furniture less receptive to bed bugs, i.e., replacing cloth furniture with plastic or vinyl. 3.2.6. Promote information to the public about how to inspect used furniture or clothing before bringing it into the home. 3.2.7. Encourage residents to do regular inspections of public and private spaces looking for signs and symptoms of bed bugs. 3.2.8. Develop and promote consistent approaches to tagging curbside waste or furniture that has been infested with bed bugs and educate the public about not picking up curbside waste or furniture. 3.2.9. Increase supports to enable small businesses and volunteer organizations to offer preparation and treatment service	Secure new funding and/or reallocate funding (3.1.1, 3.1.2, 3.2.4, 3.2.9). Using BBAG, develop a public awareness campaign (3.1.1, 3.2.1). Continue to promote health information about bed bugs through www.bedbugsinfo.ca resources (3.1.2, 3.1.3, 3.1.4, 3.2.2). Review Public Works waste policies around handling bed bug infested items (3.2.2). Review institutional response plans to include section about responding to bed bugs (3.2.10).	Start: Immediate Duration: 2 Years	City of Hamilton — Public Health Division, Community & Emergency Services Department, Income Support Division, Public Works Department; BBAG; Hospitals, Correction Facilities, Shelters, Domiciliary Hostels, low income housing.
4. Integrated Pest Management	4.1. Promote and implement Hamilton's Bed Bug Guidelines:	4.1.1. Approve and distribute the Bed Bug Guidelines to the public. 4.1.2. Request an amendment to the Property Standards By-Law that bed bug treatment must be completed by contracted service providers (licensed where appropriate) with an established IPM plan that	Secure new funding and/or reallocate funding (4.1.1, 4.1.4)). Use the Bed Bug Guideline	Start: Immediate	City of Hamilton – All departments; Social / Private housing; Community Buildings;

Hamilton's Co	ommunity Bed Bug Sti on Plan	rategy 2016-2019			
Priority Area	Recommended Activities	Strategies	Starting Point Actions	Timing	Key Stakeholders
	An Integrated Pest Management Approach for Managing Bed Bugs. 4.2. Work with the community to develop a plan to respond to barriers faced by multi- unit dwellings, work and community spaces.	follows the Bed Bug Guidelines. 4.1.3. Utilize the Bed Bug Guidelines to inform policy and program decisions. 4.1.4. Enhance funding for non-profit housing providers to offset the rising costs associated with managing bed bugs. 4.2.1. Encourage owners/landlords/property managers to install door sweeps and seal cracks and voids to reduce the spread of bed bugs between rooms and units. 4.2.2. Encourage as a best practice the inspection and treatment of all vacant rental units, in buildings where active or recent infestations are present. 4.2.3. Encourage as a best practice the inspection of adjacent units when bed bug infestations are identified.	to inform changes to legislation, programs and supports (4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.2.3). Using the Bed Bug Guidelines, monitor the Bed Bug Funding project for domiciliary hostels (4.1.4).	Ongoing	Pest Control Industry
5. Surveillance and Evaluation	 5.1. Invest in and develop long-term surveillance methods to monitor bed bugs. 5.2. Develop an evaluation plan with key indicators to measure progress of the Bed Bug Strategy. 	 5.1.1. Develop an improved data collection method to increase bed bug surveillance to better inform the public about active bed bug infestations. 5.1.2. Monitor bed bug complaints by maintaining the Public Health Complaints Database. 5.1.3. Track bed bug health promotion activities. 5.1.4. Develop a tool to monitor bed bugs and re-infestation rates across the city. 5.1.5. Track web site hits on bed bug information and resources. 5.1.6. Monitor response times for inspection, identification and waste pick up. 5.1.7. Encourage landlords to keep accurate records of bed bug complaints and treatment logs. 5.1.8. Implement a bed bug reporting program for landlords, hotels, and the hospitality industry. 5.2.1. Develop an evaluation plan to monitor the bed bug strategy and its outcomes. 	Secure new funding and/or reallocate funding (5.1.1, 5.1.8, 5.2.1). Consider methods for random sampling to evaluate infestation rates and awareness levels of residents, for example phone survey (5.1.4)	Start: Immediate Duration: 3 Years	City of Hamilton – Public Health Services Division; Community & Emergency Services; Hamilton District Apartment Association
6. Support and Advocacy	6.1. Invest in project management support to implement and monitor the Bed Bug Strategy. 6.2. Advocate to all levels	6.1.1. Secure funding for project management support for the implementation and monitoring of the Bed Bug Strategy, including coordination between stakeholders and bed bug related projects, and direct involvement with the Bed Bug Assistance Program. 6.2.1. Advocate to upper levels of government to examine and address root causes of bed bug infestations, i.e., poverty, mental & physical disability, and housing stability, etc.	Secure new funding and/or reallocate funding (6.1.1; 6.2.1; 6.2.2). Advocate through BBAG to demonstrate collective action (6.2.1). Meet with Council to promote the needs of a	Start: Immediate Duration: 3 Years	City of Hamilton – Public Health Services Division; Community & Emergency Services; City Manager's Office; Council; BBAG

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			1	(ey Stakeholders
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Hamilton's Community Bed Bug Strategy 20	16-2019	Lad bug response	e blan	
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5.0 Community Profile

Hamilton has a number of local assets that are the primary building blocks of our response to bed bugs. Building on the skills of local residents, associations, and business enhances our existing community strengths for a stronger, more sustainable response for the future. While this is not a comprehensive list of initiatives already underway, areas where we know efforts are ongoing as a response to changes in bed bug response and others that have been identified as best practice are highlighted in this section.

City of Hamilton

- Bed Bug Action Group (BBAG) (Schedule B of Appendix "A" to Report BOD14010(a)/CES14013(a)), which formed in 2010, is a coordinated, community-wide group which aims to control and prevent bed bugs, and acts as a community forum to share information and resources about bed bug problems and potential solutions.
- Development of a bed bug poster, brochure, and several bed bug videos in partnership with BBAG.
- In 2011, the City of Hamilton received one-time funding from the Province through Public Health Services to create awareness and educate the public about bed bugs, and support vulnerable populations with the control and/or prevention of bed bugs in their places of residence.
- Bed bug enforcement and identification by Public Health Inspectors through the pest section (Section 26) of the Property Standards by-law, No. 10-221.
- Public Health Inspectors also offer education and outreach on bed bugs to agencies, tenants/landlords, and the general public.
- Public Health Services tracks and monitors bed bug complaints.
- Public Health Nurse Navigator Pilot supporting vulnerable residents as they navigated the bed bug experience (November 2014 – July 2015).
- Public Health Services offers education and outreach on bed bugs.
- Bed Bug Assistance Pilot managed by Community and Emergency Services
 Department provides support to vulnerable residents with direct preparation
 assistance for bed bug treatment (November 2014 November 2015).
- CityHousing Hamilton operates an in-house bed bug response plan, including supports and education for tenants and treatment based on an Integrated Pest Management plan.
- Public Works Department offers a limited temporary program to residents including landlords providing large furniture waste bags to enclose large household waste items that have been infested with bed bugs.

 A Corporate Human Resources Bed Bug Policy and Bed Bug Guideline to address Occupational Health & Safety concerns for City staff.

Ministry of Health and Long-term Care

• Education information and resources available on www.bedbugsinfo.ca.

Community Assets

- Hamilton Housing Help Centre offers supports to residents via a Community Development Worker who provides bed bug awareness and supports.
- Good Shepherd Works offers services for unit preparation, as well as bed bug prevention kits.
- Indwell has adapted its approach to addressing bed bugs by updating furniture that is more resistant to bed bug behaviour and modifying their approach to engaging with tenants and bed bug remediation.

5.1 City of Hamilton, Public Health Nurse Navigator Pilot Project

Finding bed bugs can be a terrible discovery. The steps involved in managing bed bugs are challenging and overwhelming for some individuals. Free or low cost services to assist clients with bed bugs are lacking. Services for bed bugs are stigmatizing.

To help navigate bed bug assistance for vulnerable populations, a Bed Bug Navigator pilot was launched in November 2014 and operated until August 2015. It provided navigation support for more than 50 households struggling with bed bugs. The Public Health Nurse (PHN) Navigator reported that "all clients faced multiple complex issues including having a low income, physical or mental disability or other barriers that make individuals more vulnerable to adverse effects of bed bugs."

Partners in the pilot included Public Health Inspectors from Public Health Services, Good Shepherd Works (GSW), and the Housing Help Centre (HHC), with support from members of the Bed Bug Action Group (BBAG) and the City of Hamilton Bed Bug Internal Steering Committee. The PHN Navigator also liaised and consulted with community partners such as Catholic Family Services, Community Care Access Centre (CCAC), family doctors, and community agencies in attempts to assist vulnerable residents. Landlords and building superintendents also became important partners since all clients, but one, were tenants.

In most cases, there were gaps for vulnerable residents with bed bugs in their homes. The PHN Navigator helped residents to apply to the Bed Bug Assistance Pilot Project. She also helped residents through other system navigation, including referrals to physicians, service coordination for preparation and treatment, advocacy, education,

emotional support, and other practical and concrete supportive actions. Supportive actions included assisting clients to obtain beds, vacuums, storage bins, monitoring devices, and by providing mattress encasements for their mattress and box spring. The PHN Navigator also helped clean or sometimes unpack belongings after treatment.

Vulnerable residents need early intervention, basic services and assistance with preparation to be successful with bed bug control. They need help with home cleaning, and organizing their belongings or removing unnecessary items. Many participants were unable to do these tasks themselves, and support by the PHN Navigator was their only option.

5.2 City of Hamilton, Bed Bug Assistance Pilot Project

The Bed Bug Assistance Pilot Project (BBAPP) is a temporary program that assists persons with low income who are unable to complete prep work prior to bed bug treatment due to physical, mental, or emotional barriers. BBAPP was launched in late 2014 in response to the growing numbers of bed bug complaints experienced often by vulnerable populations. The pilot also assists low-income homeowners with the treatment of their home.

In many cases services are not available to meet preparation requirements for vulnerable individuals experiencing bed bugs and BBAPP ensures that participants' homes have been prepared properly to allow for effective treatment to occur. In some cases, BBAPP also provided tools to further control, monitor, or prevent bed bugs by including mattress and box spring encasements, glue traps, and other prevention techniques to reduce the likelihood of the individual seeing bed bugs return.

The BBAPP was funded by the City of Hamilton and delivered through the Housing Help Centre of Hamilton. The program will be evaluated and recommendations will be made to Council regarding future programs.

5.3 Indwell, No-Fault Policy

Indwell is a Christian Charity creating affordable housing communities that support people seeking health, wellness and belonging. Indwell modified their approach to dealing with bed bugs in response to the rising costs to the organization and the burden placed on tenants. By developing a no-fault policy to reporting and responding to bed bugs, Indwell was able to engage tenants and staff in bed bug education and proactive unit checks. Steven Rolfe, Director of Policy and Planning at Indwell explains that "Indwell's Integrated Pest Management Strategy calls on all staff members interacting with tenants in response to bed bugs to assure the tenant that an occurrence is not their

fault. At Indwell, staff partner with tenants to get rid of bed bugs." Tenants are not charged for inspections, education, interventions or treatments of their units.

The primary engagement strategy is to build on existing relationships. Scheduling regular checks in combination with in-house education builds a culture of awareness about bed bugs. Rolfe says, "We have positive pre-existing relationships with our tenants and we build on the trust and respect inherent in those relationships." By adopting a no-fault policy we have supported the IPM program by increasing early reporting and access to units. Tenants are also more inclined to approach staff on discovering a bed bug. Indwell recognizes that having a dialogue within our community has created an expectation that units are checked for bedbugs and that the rationale for such checks is preventative and increases tenant comfort.

5.4 Good Shepherd Services, Bed Bug Treatment Facility

Good Shepherd Works (GSW) responds to the growing bed bug problem by providing services to the Bed Bug Assistance Pilot Project (BBAPP) through remediation services. GSW provides full preparation and treatment services to clients accessing the BBAPP, including mobile remediation services. GSW provides education and prevention resources for clients, landlords, care providers and agencies about bed bugs. They also bag clothing and household items prior to treatment, vacuum and steam infested areas, and provide treatment to infested furniture as needed. During the pilot, GSW also added unpacking services for some clients following the final treatment.

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7.0 Schedules

Schedule A: Hamilton's Bed Bug Guidelines

Schedule B: Bed Bug Action Group (BBAG) Membership

Schedule C: Community Engagement Record

Bed Bug Guidelines: An Integrated Pest Management Program for Managing Bed Bugs

Hamilton's Community Bed Bug Strategy
September 2015

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Schedule A

The Guidelines were written by the Bed Bug Treatment Work Group which includes:

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With advisory support by members of the Hamilton Bed Bug Action Group (BBAG)

The main source of information for the Guidelines is:

Government of Ontario, 2011. Integrated Pest Management Program for Managing Bed Bugs. Available at

https://macoffcampus.mcmaster.ca/ocrc static/downloads/BedBugs IPM.pdf.

Questions regarding the Guidelines should be directed to:

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Please reference the Guidelines as City of Hamilton, Bed Bug Guidelines: An Integrated Pest Management Program for Managing Bed Bugs. Hamilton, Ontario 2015.

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Bed Bug Guidelines:

An Integrated Pest Management Program for Managing Bed Bugs

A Component of Hamilton's Community Bed Bug Strategy
September 2015

Disclaimer

The Bed Bug Guidelines (September 2015) is intended for the use of the public to assist in an informed and coordinated response to bed bugs. These Guidelines should assist all stakeholders in developing knowledge about bed bugs and selecting an appropriate response to infestations.

1.0 Introduction

For more information Video: All About Bed Bugs

Bed Bugs are a problem for many people in homes, institutions, organizations and businesses in Hamilton. Successful control of bed bugs requires time spent seeking support, cooperation, collaboration, and coordination among tenants, landlords, pest control companies, and other supporting agencies.

The Hamilton community has many local assets for developing programs and supports to address bed bugs, for example CityHousing Hamilton has adapted how they engage with tenants and how they respond to bed bug complaints; Good Shepherd Services has a facility that can launder and treat bed bug infested items using thermal treatment; and the Hamilton Community Legal Clinic offers services to tenants about protecting their rights; along with other services available in the community.

There are a number of reasons why bed bugs are back and with global travel and limits on pesticide use, bed bugs have spread to just about every city in the world (Government of Ontario 2010). Our ability to control bed bugs has been limited as a result of these challenges, but also because the fear of being blamed for a bed bug infestation can prevent some people from reporting bed bugs in their home or apartment, which only makes the problem worse.

The City of Hamilton in partnership with multiple stakeholders and the Hamilton Bed Bug Action Group (BBAG) has developed the Bed Bug Guidelines: An Integrated Pest Management Program for Managing Bed Bugs as part of Hamilton's Community Bed Bug Strategy.

City of Hamilton, Bed Bug Guidelines September 2015

Integrated Pest Management (IPM) programs focus on pest prevention, which requires education, inspection, and behavioural change to be successful. Managing bed bugs can be very challenging and as bed bugs can happen to anyone, anywhere, at any time it is important that our community becomes familiar with the Hamilton Bed Bug Guidelines to be able to take action to better prevent and control bed bugs locally and beyond.

Hamilton's Bed Bug Guidelines identify five components in the IPM program for managing bed bugs. These include;

- 1) Planning
- 2) Prevention
- 3) Identification and Keeping Records
- 4) Preparation and Treatment
- 5) Evaluation

The Bed Bug Guidelines have adapted the *Integrated Pest Management Program for Managing Bed Bugs* from the Ministry of Health and Long-term Care (January 2011) report, and were modified to include current examples of best practice for stakeholders. The Guidelines provide practical steps about minimum standards to inform stakeholders on best practice and the most effective methods of bed bug prevention and control.

2.0 Integrated Pest Management (IPM) Program for Managing Bed Bugs

To assist the community with bed bug infestations, Integrated Pest Management (IPM) is considered the most effective approach to controlling and at times eliminating bed bugs (Government of Ontario 2011). IPM follows a logical combination of steps.

Why Adopt an IPM Program for Bed Bugs?

If followed correctly, IPM empowers our community on the issues and signs of bed bugs for proactive prevention, while minimizing the need for disruption to residents and business operations. It also ensures due diligence in addressing pest control standards, by outlining expectations and effective methods of bed bug control. Because bed bugs are found to cause significant social consequence, responding to bed bugs proactively and through an IPM program should increase the levels of satisfaction and improve quality of life for those affected.

For more information Fact Sheet, City of Toronto, October 2008

Depending on the home, work place and the situation of the occupants, managing bed bugs can be very challenging. It is important to learn about bed bug prevention and control by reading the Bed Bug Guidelines.

Five Components of Integrated Pest Management

- 1) Planning
- 2) Prevention
- 3) Identification and Keeping Records
- 4) Preparation and Treatment
- 5) Evaluation

IPM recognizes that there are different roles and responsibilities for stakeholders, including tenants, landlords, the pest control industry, government, and the community in bed bug control. Information on "Roles and Responsibilities" for key stakeholders is provided below.

3.0 Roles and Responsibilities

When considering who is responsible for bed bugs, we all have a role to play. Examples of best practice are available in the Integrated Pest Management (IPM) Program for Managing Bed Bugs which details a collaborative approach to responding to bed bugs.

There are seven (7) key stakeholders who have distinct roles in combatting bed bugs. These include:

- Tenant
- Landlord/Property Manager/Owner
- Pest Control Operators
- Direct Support Workers
- Employers
- City of Hamilton

Tenant

Tenants are responsible for preparation of their home prior to bed bug treatment. Preventing bed bugs from entering our homes is everyone's responsibility. Bed bugs may hide or hitchhike on people and/or belongings, including furniture, soft furnishings, and clothing.

Tips for Tenants

- 1. Inspect frequently,
- 2. Report bed bug complaints immediately,
- 3. Prepare the home for treatment, and
- 4. Inform visitors of bed bugs to prevent further spread

Inspection

Inspection includes checking your clothing and belongings, including furniture frequently. For tenants who live in shared housing or have experienced bed bugs in the past, it is a good idea to be extra cautious and complete regular inspections of sleeping areas. Always inspect used clothing and household goods before bringing them into the home. When out, avoid sitting on furnishings that may be used by others for sleeping; remain standing, or sit on furniture with no cloth fabric. After leaving a residence or public space, take precautions to prevent "hitch-hiking" bed bugs from infesting your home by checking for bed bugs carefully.

Reporting

Report signs of bed bugs in writing to the landlord or property manager immediately. Work with the landlord and pest control operator to get rid of bed bugs fast. Contact the City at 905-546-CITY (2489) if you have not heard back from the landlord within two weeks.

Throughout the treatment process, you may have to report again to the landlord until treatments are completed.

Preparation

It is the tenant's responsibility, if able, to properly prepare the unit for bed bug treatment. This includes reducing clutter and maintaining a clean home. A clean home, free of clutter provides the fewest hiding spaces for bed bugs and assists in improved inspection. The landlord is always responsible for bed bug treatment. Even if the tenant does not have bed bugs, they must co-operate with the landlord's efforts to control and prevent bed bugs found within the building. After treatment, continue to monitor for bed bugs for several months to ensure their complete eradication.

Preventing Spread

Preventing bed bugs from spreading from home to home or place to place is everyone's responsibility. The chances of coming into contact with bed bugs are more likely than before. Bed bugs may hide or hitchhike on people and/or belongings, including furniture, people and clothing.

If there are bed bugs in your home, there is a risk that bugs may spread to other places Anyone who may be at risk of picking up bed bugs in your home should be told there are bed bugs. This honesty will help prevent further spread.

Tenant Resources:

Provincial Act

The tenant's legal responsibilities are outlined in the Residential Tenancies Act, 2006, S.O. 2006, c. 17, Section 33 and 36

Tenant's responsibility for cleanliness

33. The tenant is responsible for ordinary cleanliness of the rental unit, except to the extent that the tenancy agreement requires the landlord to clean it.

Tenant not to harass, etc.

<u>36.</u> A tenant shall not harass, obstruct, coerce, threaten or interfere with a landlord.

Tenants can consult with the Hamilton Community Legal Clinic (100 Main Street East, Suite 203, 905-527-4572; www.hamiltonjustice.ca) for assistance with these issues.

Landlord/Property Manager/Owner

The landlord, including homeowners are responsible to repair property, including providing treatment for bed bugs to maintain a state of good repair, fit for habitation, and free of pests. Treating bed bugs successfully relies on early identification and ongoing cooperation between the tenant and landlord. The landlord will have the greatest measure of success and the least expense, if they adopt a "no-fault/no-blame" approach to dealing with bed bug complaints. This approach encourages an open dialogue with tenants, promotes early detection and prompt reporting. Bed bugs are no one person's fault. They can happen to anyone, anywhere, at any time.

Tips for Landlords

- Provide educational material that includes tips on prevention, identification and action to tenants and be aware of signs and symptoms of bed bugs to promote proactive behaviour.
- 2. Respond to bed bug complaints quickly. Since bed bugs commonly spread, inspect all surrounding units including adjacent units beside and directly above and below.
- 3. Follow an Integrated Pest Management approach. Landlords at a minimum must hire licensed pest management companies, and are encouraged to request the contractor have an IPM plan. Tenants must be given adequate notice of treatment dates and times, plus instructions for preparing for treatment. Preparing for treatment may take weeks depending on the contents of the unit, and the tenant's abilities. The landlord must provide accommodation to tenants who have requested assistance with preparation due to disability, as outlined in the Human Rights Code.
- 4. Some landlords, such as domiciliary hostels or residential care facilities may have additional responsibilities and resources to offer clients.

Provincial Act

The Landlord and Tenant Board's role is to provide information about the Residential Tenancies Act (RTA) and to resolve disputes between most residential landlords and tenants. To contact the Landlord and Tenant Board call 1-888-332-3234 for the 24 hours automated information line; or visit Hamilton - Southern Regional Office at 119 King Street West, 6th Floor, or by calling 1-866-455-5255.

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The Residential Tenancies Act, 2006, S.O. 2006, c. 17, Section 20 and 22, outlines the landlord's responsibility for treatment of bed bugs.

Landlord's responsibility is to repair

- <u>20. (1)</u> A landlord is responsible for providing and maintaining a residential complex, including the rental units in it, in a good state of repair and fit for habitation and for complying with health, safety, housing and maintenance standards.
- (2) Subsection (1) applies even if the tenant was aware of a state of non-repair or a contravention of a standard before entering into the tenancy agreement.

Landlord not to interfere with reasonable enjoyment

<u>22.</u> A landlord shall not at any time during a tenant's occupancy of a rental unit and before the day on which an order evicting the tenant is executed substantially interfere with the reasonable enjoyment of the rental unit or the residential complex in which it is located for all usual purposes by a tenant or members of his or her household.

Local By-law

Additionally, the City of Hamilton By-Law 10-221 Property Standards By-Law Section states

<u>26(1).</u> A dwelling or dwelling unit must be kept free of infestation by pests.

Pest Control Operators

Pest Control Operators should at minimum be prepared to:

- Present an Integrated Pest Management Plan (IPM) for managing bed bugs to prospective clients,
- Provide educational material about bed bugs,
- Include a check list on how to prepare homes for treatment,
- Offer a mixture of chemical and non-chemical treatment options,
- Make referrals to other treatment companies if secondary treatment options are not available,
- Communicate a plan for treatment, including dates, length of time for treatment and number of appointments,
- Physically remove or kill visible and accessible bed bugs and their eggs, either immediately or though residual effects,
- Continue to work with owner/tenant until the infestation is controlled.

Pest control operators must hold valid operator licenses issued by the Ontario Ministry of the Environment. Only technicians with a Structural Exterminator License and trainees working under their supervision may apply regulated pest control products.

A guide to determine which products are legal for sale and use in Ontario is available at www.bedbugsinfo.ca in IPM Program for Managing Bed bugs Appendix 3.

Additional information from the National Pest Management Association (NPMA) based out of the USA, has created Best Management Practices for Bed Bugs and is available at http://www.npmapestworld.org/. The Structural Pest Management Industry Association of Ontario, a non-profit organization representing over 150 licensed companies, recommends following the guidelines of the NPMA.

To help industry professionals control bed bugs effectively, responsibly and safely, Hamilton's Bed Bug Guidelines recommend following an IPM Program for Managing Bed Bugs. Operators should be prepared to present an IPM plan for managing bed bugs and share with clients, including preparation recommendations to residents about reducing clutter, laundering of clothing, bed linens and other tasks.

A good IPM plan involves making recommendations to property managers about the types of treatments necessary, sealing cracks and crevices, correcting structural deficiencies, making mechanical alterations or modifying architecture to prevent or reduce the likelihood of infestation.

The use of nonchemical tools, strategies and technologies, as well as insecticides, to kill bed bugs is all a part of a successful IPM Plan.

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IPM involves a variety of treatment techniques (such as vacuuming, steam, heat and cold, mattress encasements and insecticides), plus several identification and monitoring tools (moats, glue traps, canine teams, etc). Technicians must inspect the premises to determine which techniques to use and also speak to the tenant to ensure that they are given information regarding the type of treatment, precautions, and steps to help with preparation. Some tenants have health issues that may be aggravated by pesticides. The tenant may then consult with their family physician for specific recommendations.

A key responsibility of the Pest Control Company is to continue working with the landlord and tenant until the infestation is controlled. Multiple service visits may be needed to eliminate bed bugs requiring all parties to work together in an honest, open, and non-judgemental manner.

Direct/Indirect Service Workers

Direct and Indirect Services Workers include agencies where staff visit or are visited by clients who may display signs or symptoms of bed bugs or be at high risk for bed bug infestation, including clients who are home bound.

For example: Community Care Access Centre, Children's Aid, Catholic Family Services, Housekeeping Services, Transit operators, etc.

A trained workforce entering a client's home plays a key role in assisting the Hamilton community with early identification of bed bugs. They also are a valuable ally to clients to ensure landlords are made aware of bed bugs and initiate appropriate IPM.

If bed bugs are suspected or identified in a client's home, good quality service must be continued. Follow agency guidelines to minimize risk, including wearing appropriate protective devices (feet coverings, scrubs, etc). A universal precaution approach is recommended and includes approaching each service as having the possibility of bed bugs, and act with the greatest level of protection for you, the client, and the community.

It is the role of direct and indirect service workers to communicate with clients about bed bugs, including the steps residents can take if bed bugs are suspected. Always maintain a no-fault/no-blame approach to talking about bed bugs, to help reduce stigma and improve early detection and reporting of infestations.

If employees have concerns about Occupational Health & Safety or the risk associated with serving clients who may be experiencing bed bugs, speak to your employer about workplace policies and procedures in place to address these concerns, or call Public Health at 905-546-CITY to learn more about managing the risks of bed bugs.

Employers

Employers in the community, including that of community agencies, school boards, and many others should provide training to employees about bed bugs and how to prevent the spread throughout our community. Employers should allow for flexibility in existing Occupational Health & Safety policies and procedures to respond to current bed bug trends. Where no policy and/or procedure exists, it is recommended that employers develop these in order to ensure that all staff members are properly trained in bed bug identification, prevention, and treatment.

Raising awareness about bed bugs helps to reduce the likelihood of acquiring bed bugs in the workplace or spreading it throughout the community. At times, staff may need to offer direct support or make a referral to a subsequent support service.

Agencies need to provide clear guidelines and protocols for the management of suspected or confirmed cases of bed bugs within their workspace, facility, on a client, or on a client's personal affects. Preventative measures, such as asking clients to place personal belongings into bags, may be advisable. Ongoing inspections of workspaces for signs of bed bugs may be warranted. As much as possible, facilities need to be inhospitable to bed bugs and kept clean and free of clutter. Recognition of skin reactions to bed bugs is an additional responsibility of caregivers.

All workplaces should implement an Integrated Pest Management Program for Managing Bed Bugs before bed bugs are discovered.

Public Spaces

Bed bugs, although primarily in areas where people sleep, can hitchhike on people or on their belongings. All members of the community need to be aware of how they might come into contact with bed bugs and on the steps to take to reduce the risk of bed bug exposure.

Within the community the level of risk for exposure to bed bugs can vary. Employees working in high risk settings or community residents utilizing community spaces should become aware of what to do if they suspect bed bugs are present and follow policies and procedures designed to prevent and identify bed bugs. In order to do this, public spaces need to create community spaces that protect the public from unnecessary bed bug exposure.

Public spaces include:

- Agencies/public areas where clients visit, but do not sleep. For example: Schools, Libraries, Mental Health Agencies, Doctor's Offices, Dental Offices, Social Services Offices like Ontario Works and Ontario Disability Support Services, Public Health Clinics, etc.
- Public Areas where people bring personal belongings and sleep. For example: Hospitals, Daycares, Prisons, etc.

Public spaces should be cleaned often and remain free of clutter to reduce the risk of bed bugs and assist in early identification. All public spaces should determine and communicate what to do if bed bugs are suspected or found on the premises to staff and the public, including providing tips on how to inspect shared spaces and who to contact if bed bugs are found.

It is important for public spaces to implement an Integrated Pest Management Program for Managing Bed Bugs even before bed bugs are discovered.

City of Hamilton

The City of Hamilton employs over 9,000 municipal staff in a wide range of disciplines and career fields, providing quality public services that contribute to a healthy, safe and prosperous community in a sustainable manner. The City has a corporate Human Resources Bed Bug Policy and Bed Bugs Guideline about bed bugs. A trained, proactive workforce enables employees to prevent, identify, and act in a timely manner to reduce bed bugs.

The role of the City in response to bed bugs may vary and involves a number of different departments. Some of these include:

Community and Emergency Services Department:

- Supports safe and affordable social housing.
- Maintain emergency service vehicles that are free of bed bugs to limit transfer between locations.
- · Respond to calls where bed bug infestations and bites are present
- Provide benefits to residents who require financial assistance, and assistance with response to bed bug infestation.

Public Health Services Department:

- · Provide education to community about bed bugs.
- Assist residents with bed bug identification.
- Respond to bed bug complaints and enforce the Property Standards By-Law 10-221
- Monitor bed bug complaints through the Public Health Services Database which includes bed bugs

Municipal Law Enforcement:

 Alert Public Health Services to bed bug infestations if and when identified during visits for the Municipal Law Enforcement Proactive program to further support PHS enforcement activities

Department of Public Works:

- Pick up household waste for disposal.
- Identify household waste items that may be infested with bed bugs.
- Provide large waste bags for residents/landlords to bag infested household items prior to waste pick up.

4.0 Components of IPM

4.1 Planning

All residents, including tenants, homeowners, businesses, and governments in Hamilton should review the Guidelines and adopt an IPM program for managing bed bugs, regardless whether bed bugs have been identified or an infestation exists.

For more information General Information Bed Bug Myths

Everyone is responsible for an IPM plan. Controlling bed bugs takes time and patience. It requires an all hands on deck approach, with an understanding that bed bugs are not any one person's fault. While stakeholders may have different responsibilities for which they are accountable, there is a role for everyone in an IPM plan. Setting an acceptable threshold or tolerance for bed bugs may differ for all people. In most cases, one bed bug is too many, because for most even mild infestations are not usually tolerated.

It is important to communicate the IPM program with others and monitor the program to provide an evaluation of success. In many cases, the IPM program that works for one situation may need to be adapted or changed over time to continue to work or to work for others.

An effective IPM plan includes:

- i. No-fault/No-blame policy
- ii. Establishing expectations
- iii. Communicating an effective IPM program

i. No-Fault/No-Blame Policy

A no-fault/no-blame policy is the best approach to planning for bed bugs. Bed bugs can happen to anyone, anywhere, at any time. People who have experienced bed bugs often talk of feeling ashamed, fearful, overwhelmed and isolated. Coping with bed bugs is very difficult, but the anxiety can be reduced if we approach our response to bed bugs with support and trust. The social stigma associated with bed bug infestations increases the potential costs and limits the effectiveness of efforts to eliminate bed bugs. Reducing stigma will create better conditions for controlling the spread.

The best defence in an IPM plan is early identification, and this is met through quick reporting and response times. If there is not an immediate response to a bed bug

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complaint, the problem will grow quickly and will likely spread throughout a unit, home, or building or beyond through transfer on objects or people.

ii. Establishing Expectations

An IPM plan sets out expectations of bed bug tolerance. The desired state of bed bug infestations is that there are no bed bugs present. Bed bugs have long been considered a pest. Because bed bugs mainly live, eat, and breed in and around where people sleep. Bed bugs are often less tolerated and can affect our overall mental health more than other types of pests, such as cockroaches, fleas, and rodents. While no one should have to endure bed bugs, in many cases assessment and treatment depends on the level of infestation. A standard for describing the level of infestation is:

No Infestation:	0 to 1 bed bug	
Mild Infestation:	1 to 2 live bugs present and/or eggs, spackling or bed	
	bug "skins" and/or found on or under sleeping area.	
Moderate Infestation:	: 2 to 10 live bed bugs present and/or eggs, spackling or	
	bed bug "skins" and/or found throughout bedroom.	
Severe Infestation:	10 or more live bed bugs present and/or eggs, spackling or bed bug "skins" and/or found throughout bedroom and other rooms or items, i.e. living room, furniture, etc.	

Bed bugs are a concern for everyone, and quick response to complaints is a determining factor to the success of an IPM program.

Residents: Whether someone is a tenant or an employee in a work place they should understand the risk of acquiring bed bugs and how to inspect living or work spaces to help with early identification. Immediate communication of suspected and confirmed bed bug infestations to the owner/landlord/property manager or work place should occur. It is a best practice to communicate all bed bug complaints in writing. If the response is delayed (over two weeks) contact the City of Hamilton (905) 546-CITY to assist with resolving the issue.

Owners/Landlords/Property Managers: Inspect all common and public areas often for signs of bed bugs. When a bed bug complaint has been filed, respond immediately by outlining the next steps and plan for assessment and treatment. It is best practice to consider all suspected complaints as active bed bug infestations until inspection and assessment can accurately determine the problem.

Community Profile: Indwell, No-Fault Policy

Indwell is a Christian Charity creating affordable housing communities that support people seeking health, wellness and belonging. Indwell modified their approach to dealing with bed bugs in response to the rising costs to the

organization and the burden placed on tenants. By developing a no-fault policy to reporting and responding to bed bugs, Indwell was able to engage tenants and staff in bed bug education and proactive unit checks. Steven Rolfe, Director of Policy and Planning at Indwell explains that "Indwell's Integrated Pest Management Strategy calls on all staff members interacting with tenants in response to bed bugs to assure the tenant that an occurrence is not their fault. At Indwell, staff partner with tenants to get rid of bed bugs." Tenants are not charged for inspections, education, interventions or treatments of their units.

The primary engagement strategy is to build on existing relationships. Scheduling regular checks in combination with in-house education builds a culture of awareness about bed bugs. Rolfe says, "we have positive pre-existing relationships with our tenants and we build on the trust and respect inherent in those relationships." By adopting a no-fault policy we have supported the IPM program by increasing early reporting and access to units. Tenants are also more inclined to approach staff on discovering a bed bug. Indwell recognizes that having a dialogue within our community has created an expectation that units are checked for bedbugs and that the rationale for such checks is preventative and increases tenant comfort.

iii. Communicating an Effective IPM Program

It is important to communicate the components of the IPM program to staff, tenants, contractors, etc. Best practice involves having open communication about bed bugs and what to do if a bed bug infestation is expected or present. It is advised to begin all tenant/landlord and business relationships with a conversation or agreements (for example, tenancy agreement) about expectations for bed bug response.

4.2 Prevention

Prevention efforts are a cost-effective approach to managing bed bugs. It is in everyone's best interest to be aware of what you can do to prevent the spread of bed bugs.

Containing the spread of bed bugs is a difficult task and in order to prevent bed bug infestation or re-infestation there are a number of good practices that people can do to protect themselves and their belongings.

To stop the spread of bed bugs, people living with bed bugs can take steps to reduce opportunities for spreading to new locations. Developing an IPM plan in advance for people who travel for work, school, or other activities; or have employment that places them at a greater risk of bed bug exposure can reduce the likelihood of bringing bed

bugs home. Establishing prevention techniques for property owners is also a good practice to keep buildings free of bed bugs.

For more information Video: How to prevent Bed Bugs

Traveler's Tips

Occupational Health

Consider these three actions to build effective prevention techniques.

- i. Education
- ii. Inspection
- iii. Behavioural Change
- i. Education

For more information Bed Bug Brochure

Increasing general awareness about bed bugs and their behaviour can be achieved through outreach and education programs. It is good practice for all people to learn more about bed bugs and what you can do to prevent an infestation. It is especially important for administrators and facility managers of shelters, group homes, apartments or condo buildings, and other types of residential housing, commercial and industrial facilities to educate residents and staff.

What can I do to prevent getting bed bugs in my home or workplace?

There are a number of things you can do to prevent getting bed bugs. Best practice tells us that early detection is the best defence of a severe bed bug problem.

Steps to reduce your chances of getting bed bugs:

- Furniture Inspect and clean all used furniture or clothing before bringing inside the home. When purchasing used goods, ask what policy is in place to ensure items are bed bug free. Consider not bringing any used furniture, clothing or goods into your home, but if not practical, take steps for inspection, including cleaning.
 - Keep furniture away from walls to prevent bugs from transferring from walls to furniture and back to hide.
 - Replace fabric furniture with metal or plastic that can be easily cleaned with soap and water; metal bed frames are recommended for easy cleaning and sealing.
 - Eliminate headboards completely, particularly wicker, wood, or fabric headboards as they have numerous hiding spots for bugs.
 - If using wooden furniture, choose white furniture and fill gaps in the frames with silicone caulk.

Beds

- Seamless mattresses are recommended.
- Repair mattress holes with tape immediately.
- Remove bed skirts as bed bugs can use these to climb up to the mattress.
- Use mattress covers (encasements) to prevent bed bugs from hiding inside the mattress and box spring or to close them in to kill them over
- Using mattress covers also helps with monitoring for bed bug activity after treatment.

- Maintenance and Cleaning Seal cracks and openings/holes in baseboards, walls and other structures.
 - Dust diatomaceous earth (silicon dioxide) into wall openings/holes and other cracks or crevices. Follow the pesticide label for directions and use.
 - Maintain a clean, well maintained household that is free of clutter.
 - Clutter serves as an ideal habitat for bed bugs and gets in the way of early identification and treatment of bed bugs.
 - Reducing clutter, especially in sleeping quarters reduces the number of places for bugs to hide and breed.

- Monitoring Implement regular inspections, regardless of whether you have had a bed bug occurrence in the past. If you have had bed bugs before, conduct weekly inspections until you are declared bed bug free.
 - Use only white or light coloured bedding to easily detect blood stains from feeding bed bugs.
 - Put glue traps or moats under the legs of bedframes or other furniture to help monitor for bed bugs and to stop movement from floor to bed and back.

Moving

- When moving, vacuum and inspect vehicles and storage facilities before placing items inside and before moving into the home or from your home.
- Consider using plastic wrapping to protect furniture from bed bug transfer.

What should I know if I am travelling for business or recreation?

All travelers to areas within and outside of Hamilton are potentially exposed to bed bugs. Bed bugs can infest even the cleanest home, hotel and belongings. Taking the proper steps to avoid bed bug hitchhikers while travelling is a good practice, whether travelling for business or recreation (Government of Ontario 2010).

Steps for <u>travelers</u> to consider:

On the way

 If you are experiencing an infestation at home, before travelling, inspect all luggage prior to leaving to prevent bringing any bed bugs on the trip. If the luggage shows signs of bed bugs, vacuum the luggage thoroughly before use.

Where you Stay

- Thoroughly inspect furniture, including beds, dressers, couches, and luggage stands for bed bugs or signs of bed bugs. If you're staying in a hotel and find signs, ask for another room or choose to stay at another location.
- Keep luggage up off the floor. If there is a luggage stand and it has no signs of bed bugs use it.
- Keep clothing inside luggage instead of using dressers and closets.

When you get Home

- Consider wrapping luggage in plastic (bag or wrap) to prevent possible transfer of bed bugs on the ride home.
- When home, leave luggage in an outdoor area or garage, and thoroughly inspect all contents of the luggage before bringing inside.
- When home, wash clothing that you wore on the trip but also put all dryer safe clothing from your luggage in the dryer on high heat to kill any bugs or eggs that may have hitched a ride.
- Before using your luggage on another trip check for signs of bed bugs before packing. If there are any signs, vacuum the luggage to remove any eggs or bed bugs.

ii. Inspection

Bed bugs are a challenging pest to manage, however, early detection combined with monthly inspections decreases the likelihood bed bugs will spread and will better control the level of infestation. While small and hard to spot, bed bugs are visible to the naked eye. A thorough inspection is recommended before any cleaning or rearranging of household items to assess the extent of the problem and also prevent disturbance and spread of bed bugs before treatment.

Bed bugs are usually found in highest concentration on the bed or wherever you sleep, but are not solely contained here. Bed bugs can hide in many locations. It is a good idea to focus inspections to the most likey areas, but remember to inspect all areas of the home and belongings. Bed bugs typically hide in hard to see, hidden places and enjoy cracks, crevices and holes. They have a preference for wood or other textured surfaces over smooth areas like glass, metal or plastic.

Typical hiding places include:

- Mattress, box spring and bed frames. To inspect your mattress, remove covers and check buttons, seams and the frame, including slats, joints and behind the headboard.
- Walls, including behind baseboards and cracks, picture frames, wall hangings, electrical outlets, wallpaper, and joints between walls and the floor or ceilings.
 Remember to check door and window frames.
- Other furniture, like chairs, couches, bookshelves and nightstands (including drawers). Check for cracks in all furniture.
- Electronics, like lamps, alarm clocks, smoke detectors and other equipment near the bed or sleeping area.
- Clothing, bedding, backpacks and purses should also be inspected.

Report signs of bed bugs and keep records of bed bugs or other pest complaints to the owner/landlord/property manager, call a licenced pest control operator,

Inspection may require some physical movement of furniture and other household items. When conducting an inspection, move slowly to avoid disturbing or scattering bed bugs. Typically, a mild infestation will be concentrated close to sleeping areas, whereas a more severe infestation could spread to other locations in the home. Prioritize inspection areas from high to low levels of infestation and focus inspection and treatment in the most heavily infested areas.

If you or someone you know requires support to conduct regular inspections, notify your landlord by letter or call Public Health to determine what assistance is available. Pest management companies and Public Health Inspectors are available to assist in performing visual inspections to determine where bed bugs are most predominant.

Recommendation for owner/landlord/property manager:

If bed bugs are found in a multi-unit dwelling, best practice illustrates that additional inspections should be made on adjacent units, including on either side and immediately above and below of a confirmed bed bug infestation. This should be continued until the presence of bed bugs is no longer found.

Tool kit for assisting with inspections:

It is recommended that when conducting personal inspections you have with you plastic vials or zip-locking bags, gloves and a flashlight. If there is no success in locating bed

bugs, placing bed bug interceptors like a mote or glue trap under the posts of the bed is a cost-effective inspection tool that requires no expertise to use.

Other tools that could assist with inspections include, magnifying glass, spatula or a tool like a credit card, screwdrivers for removing light switches or dismantling furniture, and cleaning wipes to check for dropping stains.

iii. Behavioural Change

A key factor to prevent the spread of bed bugs is changing human behaviour. Bed bugs can happen to anyone at any time however certain conditions help increase the chances of infestation and spread.

Two main behaviour changes will help control bed bugs:

Reduce Clutter - Stay Organized

- Reduce bed bug hiding spots by keeping items more orderly/tidy/organized to help with early identification and treatment of bed bugs. It is easier to see signs of bed bugs and to reach them during treatment if they can be seen
- Consider using containers for less frequently used belongings. The items inside will stay bed bug free but can still be accessed easily.
- Regular inspections and keeping a place clean and tidy combine to be the best defense against developing a severe infestation.

Prevent Bed Bug Hitchhikers

- Check for bed bugs on yourself and any of your belongings when leaving one place and visiting another to make sure bed bugs do not hitch a ride
- Be careful throwing out furniture. Try to seal furniture in bags to contain any bed bugs that may be present
- Inspect used furniture thoroughly for signs of bed bugs before bringing them inside

4.3 Identification and Record Keeping

Bed bugs range in size, but are oval shaped wingless insects that typically resemble an apple seed. Keeping records of all bed bug complaints is important to managing bed bugs.

For more information Video: Identifying Bed Bugs Identifying Bites

i. Identification

Bed bugs range in size from a poppy seed to an apple seed and adults can be much larger when engorged with blood. Droppings form dark coloured stains (they look like pepper) or bumps on hard surfaces and are usually found on bed linen, but can also be found on other surfaces where they feed or hide. Bed bugs shed skin between nymph stages, which leaves behind a moult that can be spotted on your belongings. Eggs, although very small, adhered to surfaces and will be found among droppings or in crevices where adults and nymphs hide.

Identifying a bed bug bite differs from person to person, but some people display large or small welts with red dots in the centre. Bites may form a scab. Others don't have these symptoms and instead bites resemble mosquito bites or small pimples. Often bites are in groups, but may also be found in single bites. People with supressed immune symptoms may not react to bites at all.

It is recommended that you consult a health professional to confirm bites, as bed bug bites can be mistaken for other pests.

After identifying a bed bug, it is important to confirm the level of infestation by inspection, which often requires a trained person from a pest management company or Public Health to assist with identification. If possible, request confirmation of live bed bug activity in writing.

ii. Keeping records to monitor bed bug complaints

Keeping records of bed bug complaints are a vital component of the IPM program and it is best practice to make record keeping part of your regular business practice. All people should maintain records of bed bug complaints, including details of all correspondence and activity.

What do I do if I find a bed bug?

- Tenants should report bed bugs to owner/landlord/property manager in writing and ask for follow up with a written report of findings.
- Owner/landlord/property manager should contact a pest management company immediately.
- If you have not received follow up to your complaint (two weeks), you can contact Public Health to assist with enforcement of treatment responsibilities.
- Regardless of if you are a tenant, owner/landlord/property manager or pest
 management company, keep good records of bed bug reports which include date
 of complaint, type of complaint, unit or room number, date of first inspection,
 result of inspection, details of preparation, pest management strategies that were

used, written confirmation that disposal of specific furniture is necessary and follow up with residents to prevent re-infestation.

· If you are a tenant, keep a detailed record of medications and valuables or photograph property prior to inspection and treatment.

4.4 **Preparation and Treatment**

Preparing a space for bed bug treatment is part of effectively eliminating a bed bug occurrence. Inadequate preparation limits the effectiveness of bed bug treatments.

For more information Video: What to do if I find bed bugs? How to hire, work with and prepare for a pest control company?

There are three steps involved in preparing and treating bed bug infestation.

- i. Preparation
- ii. Treatment
- iii. Pesticide Compliance

Preparation is the first step to managing bed bugs. In most cases, preparation is done by the resident, but in certain situations, residents may need assistance. Preparation can be challenging for many residents and additional support is often required to be adequately prepared for treatment. If you are a tenant who has a condition that would prevent you from conducting the preparation yourself, notify your landlord in writing that you require assistance and submit a letter from your doctor indicating this. Depending on current programs or resources available, landlords and tenants can contact the City of Hamilton to determine if there is eligibility for support.

In most cases, preparation is carried out by the resident/tenant, but it may be completed by a service provider or owner/landlord/property manager if an accommodation request has been submitted to the landlord in writing. The reduction of household clutter is absolutely necessary for managing and preventing bed bugs. Preparation should be completed systematically, starting with where the resident sleeps and includes organizing belongings and placing them in bags or plastic tote bins, laundering clothing and bedding and moving furniture away from the walls or emptying drawers and book shelves.

i. Preparation Steps:

Separate bug free items from infested items and seal and store items using plastic bags or plastic tote bins. Develop a system to easily tell the difference between stored infested items and stored non-infested items.

Wash all dirty clothing on high temperature and **dry** wet or clean clothing in a dryer at high heat for at least 30 minutes. Items that need to be dry cleaned such as drapes, rugs, and garments should be placed in a sealed bag or bin and tagged as infested for dry cleaning. Do not reuse infested bags or bins for clean clothing. Properly dispose of bags or place in the freezer to kill off any remaining bugs or eggs. Bins can be taken outdoors, vacuumed and cleaned to remove bug transfer.

Empty all drawers in areas where infestations have been identified including shelves, dressers, tables, and closets if necessary. Separate all items that are not infested by placing them in plastic bags or bins and tag as bed bug-free.

Remove all drawers and pictures from walls and place them on top or beside furnishings. Move all furniture away from walls and do not remove any infested items from the room except for those encased or bagged and tagged appropriately. If infested items cannot be treated, it is recommended that items be thrown away or consider hiring a company or service provider to place item in a heat or cold treatment facility.

Dispose of severely infested items and if possible (and ideally) encase them in plastic wrapping to avoid transfer of bugs while transporting to garbage collection. Call the City of Hamilton Public Works department to request large plastic bags for mattresses and large pieces of furniture.

Break up and demolish items that are infested to prevent others from taking them by slashing mattresses and plush furniture, breaking wooden frames, and labelling bags with the words "Bed Bugs." Place items curbside for bulk pick up.

ii. Treatment of Infested Areas or Items

There are several methods that can be used to manage bed bugs. Successful treatment depends greatly on the quality of preparation completed. A combination of treatment options including vacuuming, steam, heat or cold and chemical treatments are recommended.

Treatment is costly and labour intensive, however bed bugs can be managed with a coordinated effort and an effective IPM program. Despite the challenges of bed bugs gaining resistance to pesticide sprays, there are a growing number of methods that allow for successful remediation.

Over the Counter Products

There is presently no scientific evidence supporting the effectiveness of over the counter products or home remedies in controlling bed bugs. Use of chemicals in the home by unauthorized or untrained people is extremely dangerous; call an authorized pest control operator to conduct treatment.

Licensed Pest Control

A good pest management company will have a developed IPM program, and it is recommended that owners/landlords/property managers and businesses require pest management companies to walk them through the IPM program they will use. All operators should be licenced pest control operators if using pesticides.

Treatment Schedule

Because bed bugs are small and hide in places that you cannot always see, it is recommended that treatment occur on 2-3 occasions, 10 to 14 days apart. The reason for multiple treatment days spread apart is because chemical sprays require contact to kill adult bed bugs, but they do not kill bed bug eggs. Once eggs hatch the second and third treatments can kill them. In some cases, including issues of health concerns, chemical treatments are not always used. Increasing vacuuming, steaming and using heat or cold treatments will help to reduce the level of infestation over time.

Methods to Reduce Bed Bugs and Treatment

A combination of the following activities will be needed for bed bug management:

- Cleaning and organizing the bed, bedroom, or other sleeping areas, including elimination of clutter.
- Physically removing bed bugs, droppings and eggs by vacuuming.
- Using barriers such as mattress and box spring encasements and interceptors (moats or glue traps to catch and stop bed bugs from travelling).
- Apply steam at temperatures of at least 80 degrees Celsius to kill all life stages along with vacuuming to remove dead bed bugs.
- Wash all furniture that is not plush fabric with soap and detergent, paying attention to crevices and spaces in the frame.
- Using thermal heat for a two to six hour exposure period at 45+ degrees Celsius
 or cold treatments for five days at a minimum of -5 degrees Celsius to kill all life
 stages.
- Using a freezer capable of providing flash freezing at -15 degrees Celsius will instantly kill bed bug eggs.

- Eliminate bed bug hiding spots by repairing peeled wallpaper or paint, caulking and sealing cracks and crevices, seal floors between floor boards and tile, and make other repairs to the living area to reduce hiding spots.
- Using pesticides, by following the directions and precautions for use of federally registered products classified for use in Ontario, and contracting the services of a professional who is trained and aware of the best approaches for managing bed bugs.

In places such as commercial multi-unit buildings (e.g. hospitals, shelters, schools, office buildings etc.) cleaning teams or the facility management may be responsible for the majority of housekeeping duties. Focus on sleeping and lounging areas, and encourage residents to reduce clutter.

Vacuuming

A good bed bug vacuum includes an air HEPA filter-equipped vacuum that is dedicated to pest management only. Bed bugs can live inside the filter, attachments and bags and it is important to take a few precautions to avoid transferring bed bugs to new locations. These include:

- Dedicate a vacuum for the purpose of pest management.
- Remove vacuum bag after each use and dispose of it in a sealed plastic bag or place it in the freezer until next use or for 30 days.
- Clean the brush attachment with hot water and detergent.
- Stuff a paper towel in the hose end or place a plastic bag secured with an elastic band over the hose end to prevent bed bugs from escaping.
- Store the vacuum in a large plastic garbage bag that is closed tightly.
- Inspect the vacuum before each use and catch any live bed bugs that remain.

Pesticide Use

Incorrect use of pesticides for bed bugs poses several risks:

- Overexposure to pesticides can cause or aggravate already existing health conditions.
- Children are more susceptible to toxic effects of pesticides than adults.
- People tend to treat places where they see bed bugs, including the bed, which may result in more pesticide exposure.
- Some pesticides can cause bed bugs to scatter resulting in their spread to adjacent rooms.
- Untrained persons often use pesticides in contradiction to label directions, use illegal products and tend to over apply them.

• Bed bugs can develop resistance to pesticides used against them.

iii. Pesticide Compliance

If you have questions or suspect unlawful use of pesticides, contact the Ontario Ministry of Environment and Climate Change Pollution Hotline at 1-866-MOE-TIPS (1-866-663-8477). For information about pesticides licensed for bed bugs in Canada contact the Pest Management Regulatory Agency (PMRA) at 1-800-267-6315.

4.5 Evaluation

Monitoring bed bug complaints and effectiveness of bed bug treatment is required to assess whether the IPM program is working.

Evaluating the IPM program is important to determine its level of success. Always consider the goal and how to monitor success of the IPM plan. A successful IPM program records all pest situations and sets up a plan to measure progress with ongoing evaluation.

Some measures to consider include:

- Number of bed bug complaints.
- Number of accommodation requests.
- Response time from complaint to inspection and treatment.
- Awareness of residents about bed bugs and the IPM program.
- Re-infestation rates.
- Treatment effectiveness.

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5.0 References

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Hamilton's Bed Bug Action Group (BBAG) Membership 2015

Agency/Organization		Representation
Canadian Mental Health Association		Kelley Comely
Catholic Family S	Services	Judit Zsoldos
CityHousing Ham	nilton	Matt Bowen
		Kelly Miller
City of Hamilton	City Manager's Office,	David Lindeman
	Health and Wellness	Michelle Lokun
		Kari Lindsay
	Councillor's Office, Ward 1	Nikola Wojewoda-Patti
	Community and Emergency	David Brodati
]	Services Department	Kirstin Maxwell
		Tamara Kerr
	Hamilton Public Library	Julianna McCormick
	Planning and Economic Department, Municipal Law Enforcement	Kelly Barnett
	Public Health Services	Susan Harding-Cruz (Co-
		Chair)
		Marcia Nauta
		Connie DeBenedet
		Jennifer Snow
		Public Health Inspector
	<u></u>	(Rotating)
	Public Works Department, Waste Services	Stephen Bailey
Good Shepherd Works		Vacant
Hamilton Community Legal Clinic		Donna Eaton
Housing Help Centre		Larry Huibers (Co-Chair)
Hamilton District Apartment Association		Dan Casuccio
Real Estate Board		Augie Ammendolia
St. Joseph's Homecare		Glenys Currie
Sunrise Lodge		Calvin Cain
Tenant Advisory Committee/Senior's Advisory Committee		John Hawker

Community Engagement Record

Who we talked to and what we heard...Talking to people about Bed Bugs in Hamilton (July 2015)

Report Summary

Hamilton's Community Bed Bug Strategy was informed through consultations with more than 150 stakeholders. The goal of consultations was to get a sense of where the Strategy should focus its energy when seeking to address barriers to bed bugs. The Community Engagement Record demonstrates anecdotal findings from suggestions made through engagement activities and conversations with key stakeholders.

This record is intended to reflect the stories and ideas we heard from the people who were consulted to benefit the broader community and other communities who are facing similar challenges.

The Strategy is informed by conversations with community and intended to be 'personcentred', meaning that people and their experiences influence the way we respond to bed bug issues. A list of key issues is available in Table 1. Early in our conversations we recognized that bed bugs are a symptom of other complex conditions, such as poverty, housing and homelessness, disability, etc. The Strategy then must advocate for change to many sectors to achieve results and also consider how our local approach to bed bugs interacts within a multi-faceted environment.

Table 1. Bed Bug Issues		
Issue	Response	
Afraid to report.	Landlords should start building trust with tenants, by demonstrating that reporting bed bugs does not lead to eviction. Need to reinforce that landlords cannot blame tenants.	
Don't care.	Understand that tolerance for all people may vary. However, encourage everyone to play a role in their community.	
Don't report due to stigma.	Must continue to communicate the message that bed bug reporting should be met with a no blame policy. Bed Bugs are not a result of poverty or unsanitary conditions. They can happen to anyone, anywhere, at any time.	
Don't think it's a problem.	Educate about the impact of bed bugs.	

	Demonstrate how not responding to bed bugs creates a larger problem and the ability to control the problem is compromised. Address stigma so people feel safe and trust that they will not be reprimanded.	
Hoarders	Encourage landlords to include excessive cluttering policy. But to balance this, support hoarders to address the root cause of the problem (potential mental illness).	
Low income tenants can't afford to prep or treat belongings	Increase support to low income earners. Support for laundry, vacuums, help with prep, encasing mattress, etc.	
Low literacy / language skills	Promote provincial resources in multiple languages.	
Physical challenges	Have support available to hire or complete preparatory work for physically disabled individuals.	
Selecting Pest Control	Develop a by-law (like Montreal) that requires pest control companies to have an Integrated Pest Management Plan for responding to bed bugs that must be submitted to landlord and tenant before contracting.	

Introduction

The Community Bed Bug Strategy (the Strategy) is an activity within the City of Hamilton's 10-Year Housing and Homelessness Action Plan. The Strategy addresses Outcome 4, Strategy 4.5 of the Housing and Homelessness Action Plan, and is also linked to two additional outcomes of the Plan and related strategies - Outcome Area 1 which is related to an adequate supply of affordable housing, and Outcome Area 2 which is related to affordability of housing.

The Housing and Homelessness Action Plan sets a target for bed bugs to reduce bed bugs complaints by 25% by 2018.

A Consultation Framework was developed as a guideline for encouraging and facilitating community involvement in decision-making processes. The framework includes a consultation plan and communication plan, designed to help determine who to consult with and what the most appropriate method of communicating is required.

What is Community Engagement?

Engagement describes a process of asking people about their experience and hearing their ideas and stories. For the purpose of this document, the community was engaged through listening to stories and ideas about how to improve the City's and community's response to bed bugs based on their work and/or life experience with bed bugs.

The public engagement process is determined by considering the public participation goal and promise to the public. The consultation framework uses the standards developed in the IAP2 Spectrum to outline the public's role in this process and the responsibility of the City to determine which of the five levels of public impact will create meaningful feedback for the Strategy.

IAP2 Public Participation Spectrum

Developed by the International Association for Public Participation

	INCREASING LEVEL OF PUBLIC IMPACT	
INFORM	CONSULT INVOLVE COLLAB	ORATE EMPOWER

'Public participation' means to involve those who are affected by a decision in the decision-making process. It promotes sustainable decisions by providing participants with the information they need to be involved in a meaningful way, and it communicates to participants how their input affects the decision.

Consultation Plan

Outreach activities and opportunities to speak with and develop an understanding of experiences by the City, the non-profit sector, the private sector, and the public. The consultation plan looked to gather meaning about:

- 1. Information and knowledge (what do people know and where are they getting their information)
- 2. Attitudes and perceptions (how concerned are people)
- 3. Experience and practice (who has had bud bugs and how are they treated)

The consultation plan included three stages of consultation that informed the development of the Strategy. These were:

> Stage One:

Updates to key advisory groups, i.e., Internal Steering Committee and the Bed Bug Action Group (BBAG) and initial interviews with

other key stakeholders to understand needs and issues.

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Schedule C

Stage

Conversations with community, i.e., Community Feedback Session and focus groups concentrating on steps needed to address the

Two:

issue of bed bugs and consensus building.

Stage Three: Updates to key advisory groups and broad communication activities with community to assess likelihood of success for the Strategy and

implement key messages to move forward with Strategy

recommendations.

Community Engagement Process

Phase One: Informant Interviews

A number of key informant interviews were conducted to get a sense of the starting point actions for developing a response to bed bugs in Hamilton. Key informant interviews were conducted with individuals and with groups, some participating on more than one occasion. A total of 20 key informant interviews were conducted with 55 people.

<u>City Staff:</u> City staff from Public Health Services Department, Public Works Department, Community and Emergency Services Department, Human Resources, Planning and Economic Development and staff working on Corporate Plans such as the Neighbourhood Action Plan, Age Friendly Community Plan, and the 10 Year Housing and Homelessness Action Plan.

<u>Community Agencies:</u> 15 interviewees were from community agencies such as the Housing Help Centre, Community Legal Clinic, Indwell, Good Shepherd, Catholic Family Services, the Canadian Mental Health Association; and committees/associations such as the Bed Bug Action Group, Hamilton District Apartment Association and the Tenant Advisory Committee/Senior's Advisory Committee.

Community Outreach:

3 key informant interviews were conducted with residents including one tenant and three pest control operators. The Strategy gathered information from participation in 5 tradeshows, including 2 hosted by Municipal Law Enforcement for residents, 2 community check-in sessions, and the Ontario Works/Ontario Disability Support Program Tradeshow. Approximately 100 residents in the community were engaged through community outreach session.

Phase Two: Focus Groups

Focus groups were used to gather a deeper understanding of people's experiences with bed bugs in Hamilton. 13 focus groups, speaking with approximately 100 people were held to gather insights about the community and workplace issues that get in the way of

addressing bed bugs and how bed bugs can impact the lives of residents. Focus groups were held with City staff on the Vector Born Disease Team, Ontario Works Program, CityHousing Hamilton, Housing Services Division, and the Mental Health and Street Outreach Team. Community agencies included Good Shepherd, Catholic Family Services, Hamilton Family Health Team, Sacajawea Non-Profit Housing Inc., YWCA, Wesley Centre, Salvation Army and Mission Services. Focus groups were also held with committees and associations including, the Downtown/West Harbourfront Coordinating Committee, Hamilton District Apartment Association, Tenant Advisory Committee, Housing and Homelessness Action Planning Group, and Hamilton's Bed Bug Action Group.

Surveys

Surveys were distributed to most focus groups to learn about the general awareness of the Strategy and the likelihood of it having an impact in the Hamilton community. A total of 27 people responded to the survey.

When asked about "how aware they are about the Strategy before the focus group" 51 per cent of respondents indicated that they are 'very well' aware of the Strategy.

When asked about "how confident they are that the Strategy will improve the wellbeing of residents", 73 per cent stated that they believe a Bed Bug Strategy will lead to some or big improvements.

When asked about "what stakeholders are important to the success of bed bug response", respondents identified 'tenants', 'landlords', 'pest control industry', 'City of Hamilton" and "Provincial and Federal Government' as the top five stakeholders of importance. The 'health care sector' and 'not-for-profits' were also identified as being very important to bed bug response.

Phase Three: Updates

To hear feedback on Hamilton's draft Community Bed Bug Strategy, feedback opportunities were provided by sharing updates with the Bed Bug Action Group, The City of Hamilton Corporate Services Department, Human Resources, Public Works Department, Public Health Services Department and Community and Emergency Services Department.

What we heard?

Through consultations we heard a number of ideas for where to prioritize efforts, ideas for solutions, and stories about the local experience with bed bugs. Information collected through consultations was used to develop the priority areas and recommendations outlined in the draft Strategy.

- We heard that that the community wants to see supports for vulnerable residents to better respond to bed bugs. In particular, vulnerable residents need help with preparing for treatments, including help with laundry, vacuuming, reducing clutter, and homemaking.
- We heard that the workforce needs to be trained on the risks of bed bug exposure, how to identify bed bugs, and what to do if bed bugs are found or suspected in private/public spaces, work environment, or on clients.
- We heard that there are myths associated with bed bugs that encourage stigma about who is more likely to get bed bugs, which impacts our ability to respond quickly.
- We heard that there are challenges with relationships between landlords, tenants, and pest control companies that get in the way of good bed bug response.
- We heard that people are concerned with exposure to chemical treatment, and that we need to improve standards for bed bug treatment, including alternatives to treatment that include more than pesticides.
- We heard that we need to gather better data about where infestations occur to track and monitor the spread of bed bugs and provide information to the community about how to prevent exposure.
- We heard that bed bug response requires more than just local efforts. Bed bugs are a symptom of many complex conditions such as poverty, mental and physical disability, and homelessness.

Conclusion

Engaging with community has been an important part of developing the Strategy. Broad ideas based on community experiences have been incorporated into the Implementation Plan for the Community Bed Bug Strategy. These ideas will carry forward and inform the implementation process of the Bed Bug Strategy between 2016 and 2019, with continued dialogue to gather feedback moving forward.