DA TORONTO

REPORT FOR ACTION

Rat Response Plan

Date: June 24, 2025 To: Economic and Community Development Committee From: City Manager Wards: All

SUMMARY

This report outlines the City's Rat Response Plan that was developed in response to direction from City Council. The Rat Response Plan is the City's coordinated, proactive and strategic approach to manage rats. Rats can pose significant issues for residents and businesses, and effective management requires action from the City, private property owners, residents, businesses, and construction site managers.

The guiding principles of the Plan emphasize integrated pest management (IPM), focusing on environmental changes that minimize the conditions for rats to thrive, holistic urban pest and wildlife management, data-driven approaches, and leveraging and building on current rat response actions.

The objectives and outcomes of the Plan focus on reducing access to food, water, and shelter for rats, delivering municipal services that support a clean city, supporting residents and businesses, prioritizing rat response efforts in high-issue neighborhoods, improving coordination across City divisions and stakeholders, embedding rat response within broader urban wildlife and environmental strategies, and continuously monitoring and evaluating the City's approach.

The Plan's actions focus on governance and administration, public education, inspection and enforcement, waste management, maintaining a clean public realm, managing rats on municipal property and data collection, monitoring and evaluation.

RECOMMENDATIONS

The City Manager recommends that:

1. City Council adopt the Rat Response Plan as described in this report.

2. City Council request the Executive Director, Development Review, to include a rat management plan within the Construction Management Plan as an advisory comment in

the Notice of Approval with Conditions issued through the Site Plan Control application review process.

3. City Council request that the Chief Engineer and Executive Director, Engineering and Construction Services, the Executive Director, Corporate Real Estate Management, the General Manager, Parks and Recreation, and other City officials as appropriate, include a requirement for rat management as a component of City-led construction projects.

FINANCIAL IMPACT

In order to implement the Rat Response Plan, beginning in 2026, Municipal Licensing and Standards will require one Associate Director resource and one Project Coordinator resource with estimated annualized cost of up to \$351,000. In addition, an estimate of up to \$150,000 will be required annually to support public communication and staff training related to rat management.

The financial impact identified above will be treated as a new investment or enhancement to an existing program for consideration by the Mayor during the 2026 budget process.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the information as presented in the Financial Impact Section.

EQUITY IMPACT

The City's Rat Response Plan is expected to have a positive equity impact, particularly for low-income households. These households may experience a disproportionate burden from rat issues, as they are less likely to have the financial means to hire professional pest control services or the time and resources to manage infestations effectively. Renters may also face additional barriers, as they must rely on landlords to respond to pest issues in a timely and effective manner, limiting their ability to take direct action. By focusing on preventative measures, improving public education, continuing to deliver core municipal services that support a clean city, and implementing targeted interventions, the Plan aims to help reduce the environmental conditions that allow rats to thrive. This approach supports a more equitable outcome by helping support cleaner and healthier neighbourhoods.

DECISION HISTORY

At its meeting on July 24 and 25, 2024, City Council directed the City Manager and relevant divisions to report back to Infrastructure and Environment Committee in the third quarter of 2025 with an interdivisional action plan for the reductions of rats in Toronto.

https://secure.toronto.ca/council/agenda-item.do?item=2024.IE15.10

At its meeting on, November 6, 2024, the Bid Award Panel awarded a three-year contract, with the option to extend for two additional years, for Integrated Pest Management Services for select City of Toronto divisions to Professional PCO Services Inc.

https://secure.toronto.ca/council/agenda-item.do?item=2024.BA105.1

COMMENTS

Rat Response Plan

Challenges and Impact of Rats

Managing rats in a municipal context is challenging due to their remarkable adaptability to urban environments and close coexistence with humans. Rats breed rapidly – one pair can produce hundreds of offspring in a year – allowing populations to rebound quickly even after control efforts. Cities offer abundant food, shelter, and hiding places, making them ideal habitats. Rat populations are increasing in many cities in North America. Underlying factors include increasing temperatures, decreased vegetation, increased urbanization, and population growth. Complete eradication is virtually impossible; instead, municipalities focus on sustained, coordinated efforts to reduce rat populations and limit the conditions that allow them to thrive.

Rats can be difficult for residents and businesses to manage on their own. When a property owner successfully eliminates rats from their property, the problem can quickly return if neighbouring properties do not take similar action. Managing rats is a shared responsibility. The municipal government plays a key role in controlling rats on City property and ensuring that bylaws, policies, and requirements related to pest management, waste management and property standards are enforced – for example through Toronto Municipal Code Chapter 629, Property Standards, Chapter 354, Apartment Buildings, Chapter 575, Multi-Tenant Homes, Chapter 489, Turfgrass and Prohibited Plants, Chapter 844, Waste Collection, Residential Properties, Chapter 841, Waste Collection, Commercial Properties, Chapter 548, Littering and Dumping, Chapter 545, Licensing, and Chapter 349, Animals.

In addition to the City of Toronto's responsibilities, property owners and businesses are required to address pest issues on their own land. A coordinated approach across both public and private spaces is essential to effectively manage rats in urban areas.

Rats in Toronto are not a public health issue – there is no evidence of disease transmission linked to rats in Toronto and direction from the Province to public health units has advised that rats should be treated as a nuisance. However, they can still pose health risks in food establishments and may contribute to mental health impacts for residents dealing with infestations. Please refer to Attachment 3, Potential Health Impacts of Rats, for additional details.

Guiding Principles

Integrated Pest Management

Integrated Pest Management (IPM) is a research-based approach that focuses on removing the conditions that allow pests to thrive – specifically food, water, and shelter. Effective rat control is not just about extermination; it must prioritize clean, well-maintained properties, proper waste handling, and the removal of nesting sites. Control methods are only effective in combination with these environmental changes. Poisons and traps may limit rat populations but in the presence of abundant food sources rats tend to persist. In a municipal context, IPM also emphasizes public education and empowering residents and businesses to take preventative action. It works best when applied across properties and can form the basis of a coordinated, city-wide strategy.

Focus on Municipal Services that Minimize Conditions for Rats

The most effective municipal rat control strategies focus on core city services that limit food and shelter for rats – such as waste management and property standards – rather than relying on extermination. Efforts to "eliminate" rats often result in reactive, short-term fixes that miss the root causes. High-quality municipal service delivery is more impactful and sustainable.

Holistic Urban Wildlife Management

Rat response aligns with broader efforts to manage other urban wildlife like raccoons and coyotes. Strategies such as securing waste, maintaining properties, and promoting responsible behaviours has the benefit of managing multiple wildlife species. An integrated approach strengthens overall urban pest and wildlife management.

Data-Driven Approach

Toronto's approach is informed by academic research, practices in other cities, and available local data. Please refer to Attachment 1, Jurisdictional Review of Leading Rat Response Practices, for details. Precise estimation of rat populations is challenging, as a result, most governments and researchers use service requests and complaints to municipal governments as a proxy.

Build on What Works

Continuing to deliver existing services and programs – such as by meeting service standards and enforcing bylaws – can significantly improve rat control efforts. The City should continue to build on current efforts rather than create entirely new systems.

Objective	Outcome	Key Performance Indicator
1. Reduce access to food, water, and shelter for rats across the city.	Fewer rat-friendly conditions in public and private spaces, leading to a measurable decrease in rat presence and activity.	Reduction in the number of rats and infestations identified by City staff (year-over-year).

Objectives and Outcomes

Objective	Outcome	Key Performance Indicator
2. Continue to strengthen municipal services that contribute to urban cleanliness.	Meet or exceed key service standards in areas such as waste management, property standards, and enforcement, reducing conditions that attract and sustain rat populations.	Number of waste management, property standards and food establishment violations related to rat attractants identified and resolved annually.
3. Coordinate rat response with broader urban wildlife management actions.	Coordinated actions that support rat response with complementary actions for managing other urban wildlife such as coyotes and raccoons.	Percentage of rat response initiatives aligned with or co-delivered through broader urban wildlife management programs.
4. Support residents' and businesses' ability to prevent rat issues on their property and in the public realm through public education.	Increased public education and proactive resident and business actions to prevent and manage rat activity, contributing to city- wide prevention efforts.	Number of public education actions delivered and engagement metrics.
5. Prioritize rat response efforts in high-priority locations.	Targeted interventions and support in neighbourhoods most affected by rat activity	Percentage of high priority locations (aka "hot spots") where targeted interventions are delivered.
6. Improve coordination across City divisions and stakeholders.	A unified, interdivisional approach that leverages the strengths of multiple City services and partners, improving the effectiveness and efficiency of rat management efforts.	Number of coordinated initiatives involving two or more City divisions or external partners.
7. Monitor, evaluate, and continuously improve the City's approach.	A data-informed strategy that evolves over time, ensuring accountability, transparency, and continuous improvement in addressing rat-related issues.	Annual status updates on progress and key indicators, with recommendations for program updates and improvements.

Actions

The following sections summarize the City of Toronto's rat response actions. The Rat Response Plan also introduces new actions that the City will undertake to improve rat management. New actions are identified in the below sections. The remaining actions are a continuation of existing services or programs and are included in the Rat Response Plan as they are a key component of responding to rats. The City's actions were informed by leading practices in comparable jurisdictions. Please refer to Attachment 1, Jurisdictional Review of Leading Rat Response Practices.

Timelines to begin implementation of each action have been provided. Once implemented, these actions will continue. The timelines are categorized as follows:

- Ongoing:
 - Actions that are currently in flight and will continue
- Phase 1: Q2 2026 Q3 2026
 - Actions that will be implemented first as they are key to advancing the City's rat management efforts or are foundational to implement other actions.
- Phase 2: Q4 2026 Q1 2027
 - Actions that will be implemented following Phase 1 actions, as they are dependent on an initial action or will require more time before implementation can begin.

1. Governance and Administration

NEW ACTION: Establish a Rat Response Coordination Team, with a Designated Lead and membership across divisions and agencies, tasked with proactive coordination to improve the City's management of rats.

Coordination across functions is a leading practice in other jurisdictions that has demonstrated to be effective at managing rats as it better enables a holistic approach across services.

The Rat Response Coordination Team will serve as a cross-divisional forum to support improved coordination of rat management. The Coordination Team will meet regularly to facilitate information sharing on divisional rat management activities, coordinate on actions identified in the Rat Response Plan where needed, and collaboratively problemsolve to achieve desired outcomes. Meetings will be chaired by Municipal Licensing and Standards. The Coordination Team will include identified leads from City divisions with a role or service delivery operations that aligns with supporting rat management including Toronto Public Health, Solid Waste Management Services, Corporate Real Estate Management, Parks and Recreation, Engineering and Construction Services, Toronto Building, Development Review, Transit Expansion, and Toronto Water. Strategic Public and Employee Communications will also participate to provide advice on public communications. Each participating division will remain accountable for implementing the specific actions in the Rat Response Plan that fall within their authority and operational responsibilities.

In addition, Toronto Transit Commission, Toronto Community Housing Corporation, and Toronto Seniors Housing Corporation will be invited to join as these agencies have robust pest management plans in place, significant property holdings, and may benefit from increased information sharing with City divisions. Other City agencies or corporations may be invited to join the Team as appropriate.

Timeline: Phase 1 – Q2 2026

NEW ACTION: Provide integrated pest management training, with a focus on rats, to City staff who have a responsibility for inspecting or engaging with residents and businesses on rat related issues.

Specialized training in IPM techniques will improve City staff's ability to provide advice to residents and businesses, as well as manage rat issues on municipally owned property. Bylaw Enforcement Officers, Public Health Inspectors and City Facilities staff who manage pests and the City's third-party pest contractors will be prioritized to receive this training. These staff are part of Municipal Licensing and Standards, Toronto Public Health, and Corporate Real Estate Management.

Timeline: Phase 2 – Q4 2026

2. Public Education and Behaviour Change

Improve the City's resources about rat management, including the creation of guides and public communications, that increase public awareness and encourage behaviour change to support residents and businesses to manage rats.

Public education and behaviour change is a critical component of effective municipal rat management because it supports residents and businesses to take preventative action on their own properties. Many of the conditions that allow rats to thrive – such as accessible food waste, improper storage of waste (i.e. garbage, organics and recycling), and unmaintained outdoor spaces – are directly linked to human behaviours. These conditions can be minimized by encouraging residents and businesses to act. By raising awareness about these issues, encouraging positive behaviours, providing information, and promoting best practices, the City can help reduce the environmental factors that support rat populations. The City will deliver public communication, improve existing resources and create new resources and house this information on a single source on the City's webpage to improve its accessibility and use. Staff expertise across divisions will be leveraged, and the City will work with businesses and partner with Business Improvement Areas, with consideration to the most impacted sectors, to identify opportunities to increase awareness and positive behaviours with businesses.

In addition to public education, the City will develop internal resources – such as clear standards for effective rat management on construction sites – to ensure consistent enforcement, support interdivisional coordination, and guide proactive actions that prevent infestations before they occur.

Timeline: Phase 1 – Q2 2026

NEW ACTION: Deliver targeted education to stakeholder groups with distinct ratrelated risks or responsibilities.

Some groups require more support than others, either because they are more directly impacted by rats or because their actions can influence rat activity. The City will provide targeted public education to tenants to ensure they are aware of their landlord's responsibilities for pest management, including clear guidance on how to report unresolved rat issues to the City for further investigation and enforcement.

The City will also provide education and guidance to construction site managers, who play a key role in preventing rat infestations. Construction activity can displace rats and create conditions where they can thrive. Outreach will focus on promoting awareness of preventative measures and encouraging proactive practices on and around construction sites, in line with the Plan's broader rat management requirements for development sites (described in Section 4, Construction).

Timeline: Phase 1 – Q2 2026

3. Inspection and Enforcement

NEW ACTION: Establish Rat Response Enforcement Table to conduct targeted inspection and enforcement ("blitzes") in neighbourhoods identified as having a high prevalence of rats.

A broad systems approach focused on reducing food and shelter for rats across a municipality has been demonstrated to be most effective. Targeted interventions are also required where "hot spots" are identified. The City currently uses Enforcement Tables to take targeted action to address issues, for example conducting increased frequency of inspection, enforcement and public education of City bylaws. This approach will be taken for managing rat issues as well, through improved coordination of existing staff resources and enforcement action across multiple teams/divisions. When a hot spot is identified, staff will take concerted effort in that area to enforce City bylaws, provide public education and encourage positive behaviours related to rat management. Hot spots will be identified based on available data, notably increases in service requests and complaints.

Timeline: Phase 1 – Q2 2026

Continue to enforce property standards, waste management, and business licensing requirements that reduce food and shelter for rats.

Enforcing municipal bylaws related to property standards, waste management, and business licensing is essential to reducing food, water, and shelter for rats. Consistent enforcement helps eliminate the conditions that attract and sustain rat populations, supporting broader cleanliness in communities.

Bylaw Enforcement Officers respond reactively to complaints about rat activity on a property-by-property basis. These officers aim to respond to all complaints but prioritize enforcement efforts based on the frequency and severity of issues reported. Where pest issues are identified, a progressive enforcement approach is used, including notices to

comply and fines. If a property owner fails to comply, the City has the ability to remedy the pest issue on their property at the expense of the property owner.

Timeline: Ongoing

Continue to enforce Apartment Building and Multi-Tenant House Requirements for landlords to conduct pest inspections and reduce food and shelter for rats.

Continued enforcement of the Apartment Building (RentSafeTO) and Multi-Tenant House Bylaws is essential, as it provides a structured and proactive framework to ensure landlords are regularly inspecting for pests, maintaining clean waste storage practices, and addressing rodent issues before they escalate. These requirements are a proven and effective means of managing rat activity in higher-density residential settings, helping to support tenants and maintain property standards.

The City's Apartment Building and Multi-Tenant House Bylaws set clear standards for the maintenance and operation of rental housing, requiring landlords to take proactive measures to reduce food, water, and shelter for rodents. Landlords must conduct pest inspections every 30 days, or within three days of a tenant complaint, and ensure that pest issues are addressed to prevent spread within the property. Waste management plans are also required - multi-tenant house operators must submit these plans as part of their licence application, and apartment building landlords must post waste information, such as collection bin locations and accepted items, on tenant notification boards as part of the RentSafeTO program. During routine building evaluations and audits, bylaw officers review pest treatment records and confirm that the name of the pest control operator and upcoming inspection dates are properly posted.

If tenants believe their landlord is not adequately addressing pest issues, they can contact 311 to initiate a service request. Officers will follow up on these complaints, confirm whether ongoing treatment is being provided, and may issue a 30-day Order to Comply if landlords are not meeting bylaw requirements. Officers typically conduct monthly follow-ups to ensure pest treatments continue until compliance is achieved.

For tenants renting units not covered under the Apartment and Multi-Tenant House Bylaws – such as apartments in private homes – pest-related obligations still apply under the Property Standards Bylaw, which states that all properties shall at all times be kept free of pests and from conditions which may encourage infestation. These tenants can also contact 311 to report concerns.

Timeline: Ongoing

Continue to enforce public health standards for food premises to eliminate any rats and reduce food and shelter for rats.

Continued enforcement of public health standards for food premises is essential, as it provides a structured and proactive framework to ensure food premises are maintaining conditions that prevent rat issues and are addressing infestations when found.

Toronto Public Health (TPH) conducts proactive inspections of food premises to ensure compliance with provincial regulations requiring food premises to prevent pest entry and eliminate conditions conducive to pest harbouring or breeding. TPH Public Health Inspectors (PHIs) apply an IPM approach, offering tailored guidance to food premise operators on specific measures to eliminate rodents – beyond relying solely on pest control companies. Food premises are inspected one to three times per year, in addition to complaint-based inspections. Where necessary, a progressive enforcement approach is used, including notices to comply, fines, court summons, or closure orders. Additionally, PHIs provide general pest control information and strategies at opening inspections for new food premises to help prevent infestations and will address improper storage or use of pesticides within food premises. PHIs also have a role in supporting food safety at special events where appropriate waste management is an important component.

Timeline: Ongoing

NEW ACTION: Identify opportunities that would improve the City's ability to manage, enforce and control pests as part of the review of the Property Standards Bylaw.

As part of the Property Standards Bylaw, City staff will identify opportunities that would improve rat response through potential changes such as speeding up the timelines Bylaw Enforcement Officers can issue a ticket or summons for failing to manage pests on private property. Rat response requires immediate action. Opportunities for property owners to appeal an order to comply can lead to rat infestations becoming further established in a neighbourhood.

Timeline: Phase 2 – Q4 2026

4. Construction

NEW ACTION: Require contractors to prevent and manage rat infestations at Cityled construction sites.

Like all construction, City-led construction projects – such as road and sewer repair in the right-of-way – can cause rats to move into neighbouring properties. The City currently has cleanliness standards for City-led construction sites. These standards will be enhanced by including specific requirements for the contractor to manage rats.

The City will start including construction contract specifications for City-led construction projects that outline the contractor's responsibilities for preventing and managing rats during construction. If required, the contractor will take remedial action to remove the rats. This may include engaging a licensed pest control professional to conduct regular inspectors and the installation of control methods such as bait stations.

To implement this and the following action, City staff will develop an internal guidance document on the requirements for rat management at construction sites to ensure a consistent approach across construction sites.

Timeline: Phase 1 – Q3 2026

NEW ACTION: Require a rat management plan within the Construction Management Plan as an advisory comment in the Notice of Approval with Conditions issued through the Site Plan process for private-led construction sites, and through the Notice of Completed Review process for Metrolinx-led transit projects.

The City will begin to proactively advise private developers and Metrolinx to implement pest management at construction sites to reduce the impact of rats moving into neighbouring properties and to manage any rats that may remain on site. Construction sites can be prime attractants for rats due to ample locations for harbourage and food waste, which is often more prevalent due to illegal dumping and littering.

Advising private developers to provide rat management at construction sites is an effective way to prevent infestations and reduce the displacement of rats into surrounding areas. Including an advisory comment in the Notice of Approval with Conditions (NOAC) issued through the Site Plan Control application review process balances the goals of the Rat Response Plan with Council direction to provide an efficient development review and approval process. The Site Plan Control application review process applies to most new buildings or major changes to existing buildings, such as apartments, offices, or commercial spaces. Small projects, like single-family homes, renovations, or small-scale additions or structures do not go through the Site Plan process.

The Province's major transit expansion projects in Toronto do not go through the regular Site Plan approval process under the Planning Act. Metrolinx applications result in a Notice of Completed Review (NOCR). The NOCR contains advisory comments in lieu of conditions. The City will begin to proactively advise Metrolinx to implement pest management at Metrolinx-led transit construction sites.

It is important to note that the City does not have the legal authority to make rat management plans a condition of Site Plan or building permit approvals but will proactively advise private developers to develop and implement such plans through the development and permit application process.

The Building Code Act (BCA) requires that the Chief Building Official issue a building permit when a permit application meets the BCA and Ontario Building Code (OBC), including all applicable laws. A municipal by-law requiring rat management measures, would not be applicable law for the purposes of issuing a building permit.

Site Plan Control, which is part of the City's planning process, is governed by Section 114 of the City of Toronto Act. While it allows the City to approve certain plans and drawings related to how a site will be developed, it does not include construction-related plans like pest or rat management. Because of this, the City cannot require rat management plans as part of Site Plan approval.

Timeline: Phase 1 – Q3 2026

NEW ACTION: Provide educational information to building permit holders at the time of permit issuance and building permit inspections about how to identify and manage pests as part of their project.

The City does not have the legislative authority to deny a building permit based on the existence of a rat infestation or requirement for a pest management plan. However, the City can support permit holders – whether an individual homeowner conducting a small-scale project or large construction company – to better understand how to identify and remediate against pests, including rats. This educational information can be provided as part of existing guides or documentation given to building permit holders, such as the "Good Neighbour Guide".

Timeline: Phase 1 – Q2 2026

5. Waste Management

Continue to deliver the City's waste management programs including waste diversion initiatives and collection frequencies.

Municipal waste management is a critical component to rat management as it limits rats' food sources. The City of Toronto is a leading jurisdiction in waste management. already employing best practices that help limit rats' access to food. The City of Toronto provides waste management services primarily to residential houses, multi-residential buildings and some non-residential locations. The City does not service the majority of the institutional, commercial and industrial sectors. The City of Toronto requires its customers receiving curbside collection to set out waste in the provided bins, which are rigid containers with tight fitting lids. Organic waste is collected separately from other waste streams on a weekly basis, and the Green Bin has a locking mechanism specifically designed to be resistant to animals. City serviced multi-residential buildings and other City customers who receive front-end waste collection, must use containers that are properly covered, watertight, in sound and good working order, equipped with a locking mechanism to secure the lid in a closed position and be compatible with equipment used by the City for collection. By contrast, some other jurisdictions with a high prevalence of rats collect waste from certain customers primarily in plastic bags which are easily accessed by rats - and do not require the separation of food and organic waste.

The City delivers public education on proper waste management practices year-round. While this education is not specific to rats, the practices contribute to IPM principles as they are core to reducing access to food by rats.

Timeline: Ongoing

Continue to remind residents to submit a service request to have their damaged curbside bins repaired or replaced.

The City's process for repairing or replacing damaged waste bins is an effective rat management tool, as it helps ensure bins remain secure and difficult for rats to access. By maintaining the integrity of waste containers, the City reduces available food sources for rats and supports broader efforts to limit conditions that allow them to thrive.

Timeline: Ongoing

6. Public Realm

Continue to adhere to City service standards related to cleanliness of the public realm, and improve reporting on performance against service standards as directed by Council.

Maintaining a clean public realm reduces rats' access to key survival needs such as food, water, and shelter. Regular cleaning, proper waste management, and minimizing debris in public spaces help disrupt rat habitats and limit opportunities for rats to thrive, supporting broader efforts to control infestations across communities.

The City delivers a range of services that maintain a clean public realm, including litter cleaning along major arterial streets, sidewalks, public laneways, parks, beaches, and the public right of way. The City's current service standards aim to maintain a clean public realm. For example, the City's litter bin reliability rate remains consistently high, and the City may exceed service standards at specific locations with higher volumes of waste. However, maintaining a clean public realm can be impacted by increased demand and activity, such as busy parks during summer weekends. City Council has provided direction to City staff to improve reporting of performance against service standards – across multiple service types, not specific to cleanliness in the public realm – to better enable Council and the public to understand when service standards are not met (item 2025.EX21.11). This work will continue and will better enable Council to target interventions as needed.

Timeline: Ongoing

Continue to enforce the wildlife feeding prohibitions and take targeted action where wildlife feeding has been identified to be contributing to rat infestations.

Enforcing bylaws that prohibit wildlife feeding is an effective way to manage rats by reducing the availability of easily accessible food sources that also attract rodents. When food is left out for wildlife, it can unintentionally support and sustain rat populations. The City will advance actions to limit wildlife feeding including reviewing the effective placement of signage, public education, and bylaw enforcement.

Timeline: Ongoing

7. Municipal Property

Continue to implement pest management actions at City facilities, transfer stations, sewers, and parks.

Performing pest management on municipally owned property is important to maintaining proper conditions for the public, as well as to prevent rats from spreading onto private property. The City has a corporate contract for pest management services on its properties (<u>item 2025.BA105.1</u>). This provides a high quality of coverage and resources to protect against, and remediate, rat related issues on City property. The City's

contractor uses a variety of control methods including rodenticide and traps, and will identify needed environmental changes such as repairs to prevent rats' entry.

Rat response in parks may occasionally include the use of the City's third-party pest management vendor to conduct site visits and implement control methods if rat infestations are identified. In addition, Parks staff may remove garden beds, shrubs, planters, and yard waste from community gardens that rats can burrow under if infestations become problematic. Rodents can be a common issue at encampments in City parks. Parks staff will work with other divisions to clean-up sites and may utilize the City's third-party pest management vendor as needed.

Specialized pest management interventions are taken on City properties that have a greater likelihood to create favourable conditions for rats. Transfer stations employ integrated pest management approaches to mitigate against all pests, including rats. Sewer baiting is implemented at locations as needed.

Key City agencies – notably the TTC, TCHC, and TSHC – with large property holdings also have robust pest management programs in place. These are managed under separate contracts from the City's pest management services.

Timeline: Ongoing

NEW ACTION: Explore the use of non-rodenticide control methods for rats.

Current control methods used by the City include the use of rodenticides to control rat populations. Rodenticides play an important role in municipal approaches to managing rats. However, rodenticides - especially the more potent second-generation rodenticides - have demonstrated to be harmful to non-target wildlife. Rodenticides can enter the food chain and poison other animals such as birds of prey and foxes that feed on rats. A significant risk of reducing their use, however, is that in jurisdictions where second-generation rodenticides have been banned there has been observed increases in rat populations. In an effort to reduce the use of rodenticides, the City will explore the use of non-rodenticide control methods, such as carbon monoxide that is pumped into rat burrows, traps that kill rats via electric shocks, or the use of remote monitoring sensors. The City will explore the use of non-rodenticide control methods in outdoor settings where rats burrow, such as parks and green spaces. If these methods are found to be effective and appropriate, their application will be prioritized in Environmentally Significant Areas - spaces within Toronto that require special protection to preserve their environmentally significant qualities – to support ecological protection. Exploration of non-rodenticide control methods will involve analysis of potential costs and risks of alternative methods.

A new, innovative control method being used in some jurisdictions is rat contraceptives (aka "rat birth control"). However, Health Canada has not approved the registration, sale or use of rat contraceptive products in Canada, and it is therefore not authorized.

Timeline: Phase 1 – Q2 2026

8. Data Collection, Monitoring and Evaluation

NEW ACTION: Create rat-specific data collection fields for divisions' intake channels.

The City does not currently have easily accessible, rat-specific data. Keyword searches are used to assess the number of rat-related issues across various datasets, but these searches can have accuracy and data consistency issues, as the data may not accurately describe the issue at hand. For example, it is not possible to consistently differentiate between mice and rat related complaints or service requests to the City.

Creating rat-specific data collection fields across divisional intake channels will improve the City's ability to track, analyze, and respond to rat activity in a more coordinated and informed way. By standardizing how issues are recorded, the City can better identify trends, hotspots, and emerging concerns.

Timeline: Phase 2 – Q4 2026

NEW ACTION: Evaluate the effectiveness of the City's rat response actions.

Evaluating the effectiveness of the City's rat response is essential to understanding what strategies are working and where gaps remain. This will be done through data analysis and monitoring. To support this, data from divisions will be collected quarterly to give the City an accurate assessment of the prevalence of rat related issues being managed across divisions. This will give the Coordination Team visibility into trends and problematic areas and can target actions accordingly. The City's targeted interventions in rat hot spots will also be evaluated to determine their effectiveness and opportunities for improvement.

Continuous improvement ensures that the Plan remains responsive, evidence-based, and aligned with the needs and experiences of residents, leading to more effective and sustainable long-term outcomes.

Timeline: Phase 2 – Q1 2027

Implementation

As part of the implementation of the Rat Response Plan, Municipal Licensing and Standards will lead the newly established Rat Response Coordination Team. This team will include representatives from key City divisions, with invitations extended to the TTC, TCHC, and TSHC to ensure a coordinated, city-wide approach. The team will work collaboratively to align efforts, share best practices, and monitor progress on actions that reduce the conditions that support rat populations.

Divisions will incorporate the rat response actions identified in this report into their annual work plans, ensuring accountability and integration into day-to-day operations. Progress on these efforts will be tracked and evaluated, and staff will provide regular updates to City Council members and the public on the effectiveness of the program. This coordinated approach will help ensure that actions are sustained over time and that residents see meaningful improvements in rat control across the city.

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SIGNATURE

Paul Johnson City Manager

ATTACHMENTS

Attachment 1: Jurisdictional Review of Leading Rat Response Practices Attachment 2: Rodent-Related Complaints or Service Requests Attachment 3: Potential Health Implications of Rats

Attachment 1: Jurisdictional Review of Leading Rat Response Practices

Research Purpose

This jurisdictional scan presents leading rat response practices of ten jurisdictions comparable in complexity to the City of Toronto. Key findings from this research helped inform the actions of the City of Toronto's Rat Response Plan.

Leading Practices Summary

Rat infestations in urban areas often signal broader systemic issues such as easy access to food waste by rats, sanitation challenges, human behaviour, and construction activities that disturb rat habitats. As a result, successful rat management is contingent upon understanding and addressing these upstream determinants and not just the symptoms.

Municipalities with leading rat response practices have adopted Integrated Pest Management (IPM) principles by prioritizing proactive preventative measures, such as removing food, water and shelter for rats, educating the public to shift behaviours that contribute to infestations, proactively inspecting and maintaining municipal infrastructure, and limiting reliance on the use of rodenticides. Rats are highly adaptive and reproduce rapidly, which causes populations to rebound if systemic issues are not addressed. Leading municipal rat response programs emphasize the importance of prioritizing sustainable, long-term solutions built on a holistic, systems-based approach. These efforts are targeted, data-driven and involve strong governance, leadership and multi-agency coordination.

Key Lessons Learned

The following key lessons were learned from the City of Toronto's review of leading rat response practices in other jurisdictions.

- Strong leadership and coordination across departments is key to overcoming siloed efforts.
- A dedicated office or staff for rat and wildlife management strengthens program delivery.
- Programs should be sustainable, long-term, and holistic.
- Leading practices integrate data-driven, systems-based approaches with proactive inspection and targeted actions.
- Effective rat control focuses on environmental factors like property standards and waste management, not extermination.
- Public education is a critical tool to drive long-term reduction in rat populations.
- Community engagement through webinars, walk-throughs, and outreach builds awareness and trust.
- Building awareness of how human behaviour impacts rat prevalence is a challenge, especially in neighbourhoods with high resident turnover. Changing human

behaviour, such as, adopting proper waste sorting practices, requires targeted and consistent messaging.

- Prompt response to rat activity is essential.
- Code enforcement, violation notices, and tickets are effective tools for compliance.
- Socio-economic barriers (language, awareness, access) may prevent underrepresented communities from reporting rat issues to a municipality.
- Complaint data to a municipality should be supplemented with proactive inspections and engagement in marginalized areas.
- Use of carbon monoxide and carbon dioxide for external rat control (e.g., in parks and open spaces) is effective, low-risk, and reduces dependence on rodenticides.
- Municipalities should have in-house expertise to oversee and assess pest control strategies. Regular monitoring and evaluation of pest control contracts, or directly delivering pest control services, ensures quality and accountability.

Jurisdictions Reviewed

The following jurisdictions were included in this review:

Peel Region, Alberta, Vancouver, Montreal, Ottawa, Boston, Chicago, New Orleans, New York City, and Washington D.C.

Jurisdictions included in this review face varying degrees of rat-related issues. Some jurisdictions experience challenges on a larger scale than Toronto due to factors such as denser urban environments, infrastructure and municipal waste services that permit the use of plastic bags for waste collection which can be easily accessed by rats, and warmer climates that create longer breeding seasons.

Leading Practices

Leading rat response practices have been organized by the following themes.

1. Governance and Administration

The most effective rat response strategies take an integrated approach to coordinate actions across municipal organizational units, such as divisions, departments and agencies. This approach streamlines actions and communication, identifies policy and program gaps and overlaps, aligns efforts with other municipal initiatives, and highlights opportunities for collaboration.

A dedicated program focused on rat prevention and control exists in leading municipalities along with the following:

- **Designated individual and department** to lead the rat response program with clearly defined roles and responsibilities of partnering departments and agencies
- Integrated approach to rat management by coordinating actions across functions
- Inter-departmental steering committee or working group to facilitate coordination and collaboration across functions

Establishing a formal administrative framework for rat management provides municipalities with a clear governance structure to address rat issues comprehensively.

It defines the roles and responsibilities of relevant departments and agencies, thereby enhancing strategic direction and supporting effective policy development. Such a framework fosters a rat response approach that is structured, coordinated, collaborative, and proactive, which ultimately maximizes the impact of prevention and control efforts.

Focused rat response program	 Alberta, Ottawa, Boston, Chicago, New York, New Orleans and Washington D.C. have established dedicated rat response programs. Peel Region piloted a residential rat control subsidy program that was cancelled due to low participation, being resource intensive and having high administrative costs. A residential survey found that the program did help to increase knowledge of rat prevention from 52% to 80%, which highlighted the value of education to proactively prevent rats.
Designated staff lead	 Alberta, Ottawa, Boston, New Orleans and New York have a designated management lead responsible for coordinating their jurisdiction's rat response program. Vancouver is planning on hiring a designated lead responsible for rat management, as well as other urban wildlife issues.
Inter-departmental steering committee or working group	 Ottawa and Boston use multi-divisional working groups to coordinate their rat response efforts. In New York, New Orleans and Washington D.C., departments and agencies meet regularly to coordinate efforts and actions. New York has a task force, comprised of commissioners and programs directors, that reviews data and key priorities.

2. Public Education and Community Engagement

Across all jurisdictions, residents, property owners and businesses are responsible for addressing rat issues within their property. Municipal government rat response programs do not provide direct services (e.g., pest control) inside private residential or business properties. As such, public education and community engagement are critical to support residents in knowing their obligations to manage pests on their property by providing information and resources to support them in managing rats (e.g., guides and webinars on rat prevention and mitigation).

Public education and community engagement leading practices include:

- Educational information and resources to help residents and businesses identify, prevent and address rat issues, including customized guides, manuals, and toolkits catered to different audiences (e.g., tenants, landlords, and different types of businesses such as food establishments), and information sessions in the form of regularly scheduled free webinars and "rat academies".
- Awareness campaigns to direct residents to educational information and resources, as well as to encourage behaviour change and adhere to IPM principles. For example, newspaper ads, utility bill inserts, flyers, posters, door hangers, social media, and signage.

- **Community engagement** including offering neighbourhood walk throughs to help residents identify signs of rats and how to take action on their property, and municipal attendance at community events to build public awareness.
- A single, dedicated intake channel at the municipality for residents to report rat complaints or service requests.

Examples of Lead	ng radices
Educational information and resources	 Online information on rat ecology and rat prevention measures is a key feature of rat response programs in Alberta, Ottawa, Vancouver, Peel Region, New York City, New Orleans, Boston, Washington D.C., and Chicago. Ottawa, Peel Region, Boston, New York and Washington D.C. provide printable material catered to different audiences (e.g., tenants, landlords, public, and businesses) including brochures, posters, guides, manuals and toolkits. Ottawa, Boston, New York and Washington D.C provide information in multiple languages. Training and educational videos on rat prevention and mitigation are provided online by Washington D.C. and Boston. Regularly scheduled webinars on rat prevention featuring guest presentations and Q&A sessions are provided by Washington D.C., New York, Boston, and New Orleans. New York, Washington D.C. and New Orleans run rat academies. New York runs a Rat Academy that offers free one-day training course in rat prevention and management for community members and a more intensive three-day course for pest control professionals throughout the year. Washington D.C. and New Orleans run annual Rodent Control and Wildlife Academy to educate pest management professionals, academics, and government employees about proper rodent and wildlife management techniques and Washington D.C. runs an annual two-day Vector Control Academy facilitated by a rodent expert. New York shares data on rat inspection results on their Rat Information Portal, and data on rat complaints and NYC Health Department rat control on their Rat Mitigation Zones website.
Awareness campaigns	 Communication materials on rat prevention (e.g., newspaper ads, utility bill inserts, flyers, brochure mailouts, door hangers, and signage) have been distributed by Alberta, Peel Region, and Boston. Online awareness campaigns using social media and e-newsletters are used by Peel Region, Ottawa and New Orleans. New York conducts targeted campaigns in areas with the highest rat prevalence.
Community engagement	 New York, Boston and Washington D.C. conduct neighbourhood walk throughs to provide rat prevention and management information to residents.

	 Residents in New York can become a member of NYC Rat Pack – members are deputized to educate, engage and take action on rat mitigation in the community.
•	Alberta, Boston, New York, New Orleans, and Washington D.C. attend community events and provide information and educational material.
e	Ottawa conducts outreach with business owners, residents, and industry partners to identify factors attracting rats, provide education on rat mitigation, and ensure compliance with by-laws and property standards.
•	Washington D.C. has conducted live web chats or "Rat Summits" to discuss rodent control.
•	Alberta, Ottawa, New Orleans, New York and Boston collaborate with local community organizations to assist with community outreach initiatives.
Dedicated intake [•] channel	Alberta, Vancouver, New York City and Boston have dedicated intake channels or links to 311 on their rat information or program webpage to submit rat complaints and service requests.

3. Inspection and Enforcement

Inspection and enforcement are essential components of a robust rat response program, particularly when supported by clear policies that authorize municipalities to act on rat related issues.

Municipal Property

Most jurisdictions conduct regular, proactive inspections of municipal properties such as municipal buildings, municipally owned social housing, construction sites, parks, sewers, and waste facilities. These routine inspections are key to early detection, implementing timely interventions and preventing infestations.

Private Property

Inspections on private properties typically occur in response to service requests initiated by property owners or triggered by public complaints through 311. In these cases, municipalities may issue warnings, fines, or tickets for non-compliance, but enforcement is generally preceded by efforts to collaborate with property owners on remedial actions. Inspectors often provide practical guidance on how to eliminate and prevent rat infestations, which support both education and compliance.

The municipal department responsible for inspections depends on the type of property involved:

- **Public Health departments** typically respond to complaints involving food establishments (e.g., restaurants and grocery stores) and are responsible for ongoing routine inspection of food premises.
- Waste, sanitation or sewer departments typically handle issues on residential or mixed-use properties.

• **Pest management units** – in municipalities with dedicated, in-house rat control programs – may manage all service calls related to rats with support from other departments.

Leading practices in inspection and enforcement include:

- **Reactive inspections following requests or complaints** where municipal staff examine the issue and require the property owner to take remedial action when municipal bylaws are not being adhered to.
- Enforce City bylaws that remove food, water, and shelter for rats such as property standards, waste management, and food safety by issuing warning letters, tickets and fines for non-compliance.
- Regular proactive inspections of high-risk areas, including food establishments.

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Complaint- based inspections	 In Alberta, Ottawa, Peel Region, Boston, New Orleans, New York and Washington D.C., municipal inspectors or officers respond to 311 rat complaints or service requests. In Ottawa, Peel Region, Boston, New York and Washington D.C., for complaints or service requests for private property, inspectors conduct an external examination of the address and adjacent properties. If necessary, an inspector may refer the property to local municipal property standards or by-law or code enforcement personnel for further actions if there are infractions.
Enforcement	 Jurisdictions vary in how cases are escalated from providing educational information to support residents with remedial actions to issuing notices, warnings, tickets and fines. Boston, New York and Washington D.C. issue notices, fines or tickets for infractions that cause rat related issues, however, this is preceded by providing property owners opportunities to resolve the issue. Boston provides property owners opportunities to resolve issues, especially if they are in contact with municipal staff and communicating remedial efforts and plans. Inspectors can issue violations for noncompliance or notices to abate. Code Enforcement can issue fines for waste violations. Properties owners have 7 days to correct the issue. The case is sent to a hearing if issues remain on a property and will be addressed at a housing court. In New York, initial inspection of properties may be triggered by a 311 complaint or proactive inspection of targeted rat zone areas. A property owner will receive a Commissioner's Order to Abate (COTA) if signs of rat activity or conditions conducive to rats on the property are found. The letter includes an inspection report and guidance on how to fix the problem. Owners are provided time to remediate. If conditions are not corrected, the owner is issued a summons. Properties may be provided treatment when owners fail to do so and are billed for these services.

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	 In Washington D.C., inspectors can issue a notice to abate or will issue tickets for a fine if property owners are found to be liable for waste infractions, such as, overflowing waste containers.
Regular proactive inspections	 Alberta requires mandatory rodent inspections by pest control inspectors twice a year (Fall and Spring) on premises in the Rat Control Zone along the Alberta-Saskatchewan border. New York conducts proactive targeted inspections in Rat Mitigation Zones (RMZs), which are areas with high levels of rat activity and where the City focuses resources to address rat issues and the conditions that support them. Proactive inspections are conducted for all tax lots (municipal and private) in an RMZ twice a year. NYC also has indexing zones where inspection is provided once per year. Inspection of these zones is capacity dependent and not legislated like the RMZs. New Orleans conducts regular proactive inspections of "hot spots", which include green space, residential and tourism areas. Boston is piloting a regular proactive inspections that have risk factors for rodent activity, such as sewer infrastructure, proximity to parks, restaurants and high-density housing that may be underreported through the 311 system. Boston recognizes that some neighbourhoods are less likely to report issues via 311, so the program is designed to identify and inspect these areas before complaints arise. The program uses a combined model that considers both 311 data and key environmental indicators to generate target locations for proactive inspections.

4. Waste Management

Implementing and maintaining effective waste management is crucial to managing rat populations as human food waste are urban rats' primary food source.

Leading practices for waste management include:

- Provision of free municipally issued rigid waste containers with tight fitting lids.
- Waste diversion programs that separate food and organic waste from other waste streams.

Secure waste collection	 Cities with high prevalence of rats focus on improvements to municipal waste collection, such as, eliminating the use of plastic bags and requiring the use of rigid containers. For example, Chicago supplies free rigid waste bins with tight fitting lids to single-family residences.
containers	 Ottawa and Peel Region supply households with free rigid green bins with tight fitting lids for food and organic waste. New York has begun requiring the containerization of all residential garbage into bins with secure lids to remove garbage bags off

[]	
	streets, starting with a pilot program in Manhattan Community District 9.
• Waste diversion program separating food and organic waste	 Ottawa, Peel Region, Vancouver and municipalities in Alberta have a waste diversion program that separates food and organic waste from other waste streams. Residential customers (primarily single-family homes) are required to use municipally issued rigid green bins for food and organic waste, which is collected weekly. NYC launched a curbside composting program in Fall 2024. All NYC residents are required to separate food and organic waste from other waste streams and use bins 55 gallons or less with secure lids. As of April 2025, property owners may receive a fine if compostable material is not separated from the main waste stream. Boston has a voluntary free food and organic waste collection program offered to residents who live in buildings with six units or less. Residents can enroll in the program and are provided with green bins with tight fitting lids for weekly curbside pick-up. For residents in buildings with more than six units, food and organic waste can be dropped off at community drop-offs located throughout the City.

5. Construction and Development

Excavation and demolition activities at construction sites can disrupt rat nests, driving them to seek new shelter and food sources in surrounding areas. Moreover, a construction site that is unclean and has food waste – for example, generated by illegal dumping – create prime conditions for rats. This can lead to an increase in rat sightings and infestations in nearby homes, businesses, and public spaces.

Construction Sites – Municipally-led

Taking proactive measures at municipally-led or -managed construction sites is a leading practice, which include:

- **Preconstruction site assessments** to investigate rat presence on a site and take necessary control measures before construction begins to mitigate against rats moving to neighbouring areas.
- **Maintaining clean construction sites** with a focus on removing any sources of food that may be conducive to rats, which includes frequent site inspections.
- **Requiring pest management programs** at construction sites including baiting and monitoring.

Construction Sites – Private-led

Ontario municipalities may not deny building permit issuance based on rat prevention requirements. There are examples of American municipalities that have the ability to require pest management plans as part of the development approval process. Leading practices at private-led construction sites include:

- Require or encourage pest control plans as part of construction permit approvals, including pre-construction inspection, baiting and monitoring and throughout the project.
- Enforcing City bylaws related to property standards and waste management to reduce food and harborage at construction sites.

Preconstruction site assessments	 Peel Region, Boston and Washington D.C. require preconstruction site assessments and abatement on municipal construction sites. Ottawa is piloting a project to conduct preconstruction baiting to collect data and understand the merits and challenges associated with baiting prior to construction.
Regular site inspections	 Peel Region conducts regular site inspections for rat presence on municipal construction projects.
Rat abatement plan	 Boston requires rodent control measures for both municipal and private construction projects. Rodent control and assessment by a licensed technician are required to obtain a permit for new buildings, excavation and demolition projects. Washington D.C. requires a rodent control plan to be included as part of a building and demolition permit approvals process.
Collaboration and coordination with contractors	 Peel Region collaborates and coordinates with construction contractors to ensure that rat prevention measures are performed and sites are kept free from sources of food and shelter that attract rats.

Examples of Leading Practices

6. Municipal Property Management

Rat control measures is a key component of municipal property management plans for municipal buildings, parks and green spaces, and sewers. Some municipalities have a dedicated team that manages rat issues at all municipally owned property, others manage the issue on a department-by-department level. Some municipalities deliver pest management services directly through City staff, while others contract out the service to third-party, professional pest management services. For parks and green spaces, municipalities mainly focus on waste management, greenery maintenance, discouraging or prohibiting wildlife feeding and using control measures less toxic to other wildlife, humans, and pets than second-generation anticoagulant rodenticides.

Leading practices include:

- **Monitoring and inspecting municipal property** for rats, and responding to any infestations immediately.
- Ensuring effective property management and eliminating food sources and places for shelter for rats on municipal property.
- **Maintaining parks and greenspaces** in a manner that makes it a less hospitable environment for rats, including minimizing conditions that are attractive for nesting.
- **Baiting sewers** where there is evidence of rats using sewers as transportation corridors, or sheltering in sewer systems.

Examples of Leading Practices

Examples of Leading Fractices		
Regular monitoring and inspecting	 Ottawa, Boston, New Orleans, New York and Washington D.C. regularly monitor and inspect parks for rat activity. New York regularly inspects schools and NYC Housing Authority sites for rat activity. 	
Waste management	 Montreal plans to place park waste bins in storage units designed to reduce access by rodents. Ottawa plans to increase green and blue bins in parks to reduce rats attracted to food waste. 	
	 Boston has installed new garbage barrels in various parks and several sidewalks to reduce food sources for rodents. 	
Greenery maintenance	 Boston uses anti-rat garden maintenance practices that minimize areas attractive for nesting. 	
Wildlife feeding	 Peel Region, Ottawa, Vancouver, Boston and New Orleans discourage or prohibit feeding wildlife in parks using signage and staff reminders to visitors. 	
Regular inspection of sewers	 Ottawa and Boston inspect, bait and monitor rat activity in sewers. 	
Technology	 Boston is piloting the use of remote rodent sensors for various municipal properties to monitor rat activity and measure the impact of interventions. 	

7. Control Methods

Some jurisdictions are reducing or eliminating the use of second-generation anticoagulant rodenticides due to their harmful effects on other wildlife, ecosystems, and pets. Leading municipal practices prioritize a focus on preventative measures following IPM principles, which emphasizes long-term, sustainable control by addressing the root causes of infestations. IPM is widely recognized as more effective than using rodenticide alone. Rodenticides are short-term reactionary interventions that may only provide temporary relief and do not address underlying conditions that support rat populations.

Leading control methods include:

- **Non-chemical controls** include the use of baited traps (e.g., traditional snap traps and smart trap technology that administers electric shocks to rats), and removal or disruption of burrows.
- **Chemical controls** involve the use of anticoagulant and non-anticoagulant rodenticides, contraceptive chemicals, and inserting gaseous asphyxiants into rat burrows.
 - Non-anticoagulants disrupt the nervous system and include single-dose poisons such as zinc phosphide and bromethalin and pose less risk of secondary poisoning than anticoagulants.
 - First-generation anticoagulants include warfarin, chlorophacinone and diphacinone, which require multiple feedings for a lethal dose, making them less

potent than second-generation anticoagulants (SGARs). SGARs include brodifacoum, bromadiolone, and difethialone and are lethal in one dose, but death is often delayed. The use of SGARs was banned in British Columbia in 2023 due to their high potency and persistence in the environment. SGARs can remain in animal tissue for over one hundred days, which increases the risk of secondary poisoning to non-target animals.

- Rat contraceptives an innovative chemical control being used in US jurisdictions uses bait containing birth control that disrupts the reproductive system in both male and female rats. Birth control products for rats are not permitted for use in Canada. Other jurisdictions reviewed have not demonstrated measurable success with rat birth control bait, as it is only effective when consumed by rats consistently over a long period of time, which is very challenging as rats have multiple food sources in an urban environment. Success of using rat birth control requires removing other sources of food, which inherently reduce rats in an area.
- Gaseous asphyxiants for rat control come in the form of carbon monoxide gas (CO), which is pumped into rat burrows, or carbon dioxide (CO2) solid pellets (also known as dry ice pellets or "rat ice"), which are placed in rat burrows.

Chemical Control	 Gaseous Asphyxiants: Boston, New Orleans, New York and Washington D.C. use CO and/or CO2 for external rat control, particularly in parks and green spaces. In Boston, using CO is the preferred method for external control, as it is effective, cost effective, more humane than rodenticides, and does not pose a threat to other wildlife. Municipal inspectors in Boston have received training on using CO machines and are licensed to use CO and CO2 control methods. Boston uses rodenticides less toxic to other wildlife (e.g., non- anticoagulant and first-generation anticoagulant). Birth control – New York and Washington D.C. piloted the use of birth control for rats and did not find it to be effective in reducing populations long-term. New York is revisiting birth control for rats to reduce use and reliance on rodenticides. In 2024, NYC Council legislated a pilot program to deploy rat contraceptives for a period of at least 12 months in two areas within RMZs in conjunction with its waste containerization initiative (to reduce rat food sources). This pilot program launched in April, 2025. NYC Department of Health and Mental Hygiene (DOHMH) is required to perform monthly inspections of the pilot areas to track signs of rats. In 2024, Ottawa requested Health Canada to consider legalizing rat birth control as a more humane and environmentally safe rat control method.
Non- Chemical	 Alberta and Vancouver use snap traps in bait stations. Boston removes and disrupts rat burrows in parks. Boston is exploring the use of smart trap technology that uses lethal electric shocks and uploads data for monitoring rat activities.

•	Boston is exploring the use of a CO2 piston trap that uses a motion and heat sensor to detect and kill rats and upload data for monitoring rat activities.
•	Boston is piloting the use of Remote Rodent Sensors (RRS) in 15 municipal locations to monitor rat activity and measure the impact of interventions.

8. Data Collection, Monitoring and Evaluation

Accurately tracking rat populations is a challenge for municipalities and researchers. As a result, jurisdictions rely on supporting indicators, such as 311 complaints and sighting reports, inspection findings, frequency of enforcement actions, and bait station activity to assess rat presence and identify high-activity areas.

Leading practices in data collection, monitoring and evaluation include:

- Encourage residents to report rat sightings through 311, online platforms, or dedicated rat control programs, which help build a picture of rat prevalence and inform targeted interventions.
- **Supplement 311 data with other verified data sets**, such as inspection and monitoring station reports.
- **Classifying and coding rat-based complaints or requests** and including clear intake channels where the public can report a rat-related issue.
- **Maintaining a dataset of all rat-based complaints or requests** to give municipalities the ability to better monitor and analyze rat issues, including high-activity zones for rats.
- Use of innovative data collection methods, including Remote Rodent Sensors (RSS) that can highlight areas with the most activity and help target interventions. They can also measure the change in the number of rats at a given location to evaluate the effectiveness of new control methods (e.g., changes to types of garbage bins or pick-up frequency). They can also have cost-savings benefits, as they reduce inspection frequency of an area.

Remote Rodent Sensors (RRS)	 Boston employs the use of RRS for parks and is piloting use on 15 municipally owned or managed locations to measure impact of interventions and monitor rat activity. New York has piloted the use of RRS to monitor rat activity in various places including parks, schools, and municipal housing located in RMZs (44 RRS in Harlem and 24 in Lower East Side). The data collected is used to target and measure the impact of interventions.
GIS/Mapping	 Boston uses a GIS dashboard that enable rat related calls to be mapped and viewed. New Orleans uses GIS to conduct spatial analysis of 311 complaints data with other datasets, such as, garbage dumpster and restaurant locations.

 New York City has an extensive Rat Inspection Mapping Tool that captures inspection data and areas of high rat prevalence that
enable targeted actions.

9. Consultation and Collaboration

Collaboration and consultation with other jurisdictions and experts allow for the exchange of best practices, lessons learned, innovative approaches, and the latest research, data and technological solutions, which enhances decision-making, program planning and program effectiveness.

Leading practices include:

- **Annual symposiums** for municipalities, pest management professionals, and academics to share information on rat management best practices.
- **Municipal rat management virtual meetings** organized by and for municipalities interested in sharing ideas, resources and updates on rat management approaches.
- **Consultation with experts and academics** in rat ecology and management to seek advice, develop municipal rat response plans and attend webinars and educational events as expert guest speakers.

Annual Symposium	•	New Orleans, New York, Boston and Alberta attend,					
Organization or		participate or host annual rat symposiums to share and					
Participation		gain knowledge on rat management best practices.					
Consultation with rat experts	•	Peel Region, Ottawa, Vancouver, Boston, New Orleans, New York City and Washington D.C. consulted with rat experts to seek advice, develop municipal rat response plans and attend events as expert guest speakers.					

Attachment 2: Rodent-Related Complaints or Service Requests

There is no reliable method to estimate the number of rats in cities, so municipalities typically rely on service requests or complaints as a proxy. In 2024, the City of Toronto received approximately 2,500 rodent-related service requests. This represents 0.2% of Toronto's 1.16 million households.

However, these numbers likely underrepresent the true scale of the issue. Since property owners are responsible for managing pests on private property, many residents do not report rat activity to the City.



Figure 1: Rodent-Related Complaints or Service Requests, Graph

The table in Figure 2 provides the number of rodent-related complaints or service requests the City received between 2015 and 2024 for residential or commercial properties, food establishments, City indoor properties and sewers. The table also shows the percentage year-over-year change for these requests. The total number of rodent-related requests to the City has increased from 1,165 in 2015 to 2,523 in 2024. The number of requests has slowed over the last two years and experienced a slight decrease (-2%) between 2023 and 2024.

Year	Residential or Commercial Properties	rFood Establishments	City Indoor Property	Sewers	Total	% Year over Year Change
2015	956	209	0	0	1165	-
2016	1156	277	0	0	1433	23%
2017	1220	313	0	5	1538	7%
2018	1318	347	16	7	1688	10%
2019	1412	407	18	1	1838	9%
2020	1317	171	9	1	1498	-18%
2021	1624	157	22	9	1812	21%
2022	2050	289	35	0	2374	31%
2023	2167	357	48	7	2579	9%
2024	2108	346	58	11	2523	-2%

Figure 2: Rodent-Related Complaints or Service Requests, Table





Data limitations:

This data includes both confirmed rat sightings and complaints or service requests received by the City based on concern or assumption (e.g., fear of rats being attracted due to garbage). While mouse-related service requests have been removed from some datasets, they cannot be separated from all datasets – the above data also includes

instances of reports of mice. Work orders reflect rat or rodent issues at indoor City properties, but not all City properties such as parks.

This data does not include rat issues in Toronto which were not reported to the City by residents or businesses.

Attachment 3: Potential Health Impacts of Rats

Toronto Public Health reviewed available evidence for both the mental health and communicable disease impacts of rats and outlined the relevant results below.

Mental Health Impacts of Rats

Rat populations are increasing in many cities in North America. Underlying factors include increasing temperatures, decreased vegetation, increased urbanization and population growth.¹

Rat populations are not uniformly distributed across cities. In North America, rat infestations are most likely to occur in neighbourhoods with lower socioeconomic status and higher proportions of renter households.² Residents from lower socioeconomic backgrounds may not have the financial resources to hire professionals, time to manage the rats themselves or social capital to advocate for city services.³

Some people living in areas with rat infestations also report psychological distress, disturbed sleep and stress arising from safety concerns from perceived risk of disease transmission and damage to their homes.⁴ Rat sightings may affect mental health through the perceptions of powerlessness, neighbourhood stigma and fear associated with other neighbourhood disorders.⁵ Some research shows that individuals who see rats daily are more likely to experience greater depressive symptoms than those who never see them or see them infrequently.⁵ However, the quality of data describing the impact of rat populations or an individual's exposure to rats varies widely between studies. Given that rat infestations are often associated with areas with lower socioeconomic status, there is potential for confounding factors such as sub-standard housing or crime which may cluster in these lower socioeconomic areas impacting residents' mental health.

Potential Disease Spread

Health data linked to rats demonstrates that they are not a significant contributor to disease transmission in Toronto (see table below). Provincial direction to public health units remains that rats are not a health hazard but rather a nuisance as they are not a significant contributor to disease transmission.

Toronto Public Health reviewed the list of Diseases of Public Health Significance (DOPHS) and selected those for which rodent exposures are a significant potential source of exposure. The number of cases of these rodent-associated diseases in Toronto residents was then obtained from the provincial integrated Public Health Information System (iPHIS) or laboratory sources. It is important to note that the source of these cases is not known to be rodents, specifically, but they can be acquired from rats.

Leptospirosis is not a DOPHS and the numbers were obtained through a request to Public Health Ontario, the provincial medical laboratory. These numbers do not distinguish between cases acquired in Toronto or from outside of Toronto. Toronto has experienced low rates of these diseases potentially related to rodent exposures with no overall trend in the number of confirmed cases. These are small numbers when compared to other DOPHS such as those associated with contaminated food.

The table in Figure 4 shows the number of cases of diseases potentially related to rodent exposures between 2015 and March 2025 in Toronto.

Figure 4: Number of Cases of Diseases Potentially Related to Rodent Exposures
Between 2015 and March 2025 in Toronto, Table

Disease	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<u>Q Fever</u>	1	0	2	1	0	1	0	1	0	5	0
<u>Trichinosis</u>	1	0	2	1	2	1	0	0	0	1	0
Leptospirosis	4	1	2	2	2	2	0	2	1	2	2
Plague, Hantavirus	, 0	0	0	0	0	0	0	0	0	0	0
Tularemia											

1. Richardson, J. L., McCoy, E. P., Parlavecchio, N., Szykowny, R., Beech-Brown, E., Buijs, J. A., ... & Kiyokawa, Y. (2025). Increasing rat numbers in cities are linked to climate warming, urbanization, and human population. Science Advances, 11(5), eads6782.

2. Lam, R., Byers, K. A., & Himsworth, C. G. (2018). Beyond zoonosis: the mental health impacts of rat exposure on inner-city residents. J Environ Health, 81, 8-13.

3. Murray, M. H., Byers, K. A., Buckley, J. Y., Magle, S. B., & German, D. (2024). Associations between rat infestations and mental health vary by gender, race, and income in Chicago. Journal of Urban Health, 101(2), 318-326.

4. Byers, K. Á., Cox, S. M., Lam, R., & Himsworth, C. G. (2019). "They're always there": resident experiences of living with rats in a disadvantaged urban neighbourhood. BMC Public Health, 19, 1-13. 5. Murray, M. H., Byers, K. A., Buckley, J. Y., Magle, S. B., & German, D. (2024). Associations between rat infestations and mental health vary by gender, race, and income in Chicago. Journal of Urban Health, 101(2), 318-326.