Introduction

Rodents cause damage by burrowing holes, tearing through trash bags, eating gardens, and gnawing through infrastructure. To combat this problem, the Shelby County Health Department Rodent Control Program is surveying the community, investigating complaints, educating the public, enforcing local ordinances related to rodent activity, and controlling rodent populations to secure public health and safety. The Rodent Control Program serves roughly 900,000 people residing in seven cities and towns.

The Rodent Control Program is a branch of the Environmental Health Services Bureau, Vector Control Section, which includes mosquito, rabies, and rodent control. The Rodent Control Program has been operating for approximately 10 years.

The Rodent Control Program is fully funded through a Tennessee-legislated Vector Control Fee, which consists of $0.75 per month issued on utility bills. Allocations of this fee are committed to rodent control, but most funds are allocated to mosquito control. Allocations are flexible; for example, more funds can be allocated toward rodent control if rodent problems are significant. Rodent control funding has remained the same for the past five years.

Rodent Control Activities

As part of rodent control monitoring and tracking activities, the Rodent Control Program follows integrated pest management principles to monitor and respond to rodent activity efficiently and safely. In 2014, the Rodent Control Program responded to 175 to 200 complaints on average per month, depending on the season. The complaints were recorded in a database. The information received from complaints and observations was recorded and tracked with tools such as geographic information system (GIS). After a complaint was submitted, staff observed the complaint area, placing Environmental Protection Agency-certified rodenticides in rodent holes when uncontrolled populations were identified. Additionally, staff were unable to enter private homes or businesses and were strictly limited to observing and placing rodenticides around the perimeter of buildings.

In Shelby County, the most common rodents are roof rats and Norway rats. The Rodent Control Program neither actively captures rodents nor tests for pathogens or ectoparasites. The program does not track rodent-borne illnesses, bites, and injuries but relies on experts in its Epidemiology Division and hospitals to notify the program. In the past year, the program was notified about no rodent-borne diseases. Compiling all data received, the program is able to survey the geographical area to improve surveillance techniques, better enforce the government codes regarding rodents, and monitor health outcomes.

Public Education and Partnerships

Taking information the program has gathered about the rodent problem in Shelby County, staff created outreach programs to educate the public. While the program does not have a rodent-specific communication plan, staff do speak at various public events about rodent control. The program has dedicated an outreach and educational coordinator to conduct rodent control education and outreach at local community events. The program also provides free information to the public both at the health department office and online.

Policies and Regulations

The Rodent Control Program’s policies and training manuals relating to rodent control are under revision. All laws and regulations related to rodent control are reviewed annually. The Rodent Control Program makes an effort to educate and inform the public about any changes in laws or regulations, but an assessment has not been made to monitor public compliance with these laws.
The Rodent Control Program aims to proactively control the rodent population by continually spreading awareness in the community, ensuring that local ordinances are being enforced, and eliminating rodent infestations when they directly threaten public health in Shelby County.

Rodent Control Program Workforce

All employees are certified pesticide control operators. The Rodent Control Program health department is creating a written standard of practice for requiring certification for all employees.

Evaluation

Currently, no official evaluation plan exists for the Rodent Control Program in Shelby County, but an observed outcome of followed-up complaints demonstrated that the rodent problem was less severe than originally reported. The Rodent Control Program noted that, after intervention and education, the number of rodent-related complaints began to decrease.

Conclusion

The most significant challenges for the Rodent Control Program involve public knowledge and awareness of rodent control, for example, making the public aware that rodent control inspectors cannot enter private homes or business. Also, there is general misinterpretation that the Rodent Control Program acts as an alternative pest control service.

The success of the Rodent Control Program was made possible by the environmental courts’ ability to be proactive and enforce the local rodent-related codes, for example, trash regulations. The effective work done by the Rodent Control Program resulted in no cases of rodent-borne illness, injury, or disease reported or transmitted in Shelby County.

In the future, the Rodent Control Program hopes to develop a more effective educational outreach program for rodent control. The Rodent Control Program is also working toward training staff to operate GIS programs to track rodent activity and record complaints more efficiently.

Overall, the Rodent Control Program aims to proactively control the rodent population by continually spreading awareness in the community, ensuring that local ordinances are being enforced, and eliminating rodent infestations when they directly threaten public health in Shelby County.

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