

**Lead Agency:** Health Department

**Program Contact:** Chris Wirth

**Program Offer Type:** Existing Operating

**Related Programs:**

**Program Characteristics:** In Target, Climate Action Plan

### Executive Summary

This program protects the public from emerging and imminent vector-borne diseases and reduces the social/economic impact of uncontained outbreaks. Vector-borne diseases are transmitted from animal to humans. The major emerging diseases are vector borne (e.g. Hantavirus, West Nile virus (WNV)). Climate changes in the NW, such as warming winter temperatures, increase in rainfall, and urban landscape management will increase the risk of vector-borne diseases. Intervention strategies include surveillance, analysis, proactive control/abatement of rodent and mosquito populations and public education. Program includes enforcement of nuisance codes. The program solicits input from a Commissioner-appointed Citizen Advisory Committee.

### Program Description

Multnomah County's climate supports an ideal mosquito and rat habitat. International airport and shipping along with migratory bird flyways provide avenues for new diseases to enter the community. Mosquito control began in the county in the 1930's when malaria was endemic. In 2012, eight counties in Oregon reported 87 mosquito-cases of West Nile Virus – a significant increase since last year. Additionally, the county had a human case which was acquired out-of-state. It is necessary to maintain current levels of surveillance and control to ensure early prevention and suppression of this disease using World Health Organization and Center for Disease Control best practices. Rodent control is critical to public health. Rodents can spread Hantavirus, plague and other diseases and can affect livability. A recent survey in the county rat population showed Toxoplasmosis (Cat Box Fever) in 6% of the rat population. Vector Control protects the community by serving all populations, while focusing on the vulnerable (i.e. elderly, children, homeless). The citizenry understands and expects these program functions.

**Objectives:** Collection and identification of mosquitoes, birds and rats. Monitor for and respond to emerging vector-borne diseases such as Hantavirus and West Nile Virus. Perform laboratory analysis on rats and mosquitoes to determine what species carry disease, their preferred habitats, and population size. Abate and or suppress mosquitoes that carry West Nile Virus with pesticides with the least impact, reduce the population by water control and vegetation management to reduce breeding habitats. Educate the average citizen and vulnerable people about preventing vectors and their habitats through community meetings, pamphlets and the media.

**Components:** Mosquito Control – majority of funds/staffing. Rodent Control - primary service provider for rodent control countywide. Nuisance Code Enforcement – addresses public health code violations, esp. restaurant enforcement, dumping and harboring specified animals (e.g., bees, livestock, and birds).

### Performance Measures

Measure Type	Primary Measure	Previous Year Actual (FY11-12)	Current Year Purchased (FY12-13)	Current Year Estimate (FY12-13)	Next Year Offer (FY13-14)
Output	Number of acres treated for mosquitoes	5,825	3,700	4,000	4,200
Outcome	Mosquitoes prevented (In billions)	29	19	20	21
Efficiency	Number of acres treated for mosquitoes per FTE	1,165	740	800	840
Output	Number of rodent inspections conducted	935	845	850	850

### Performance Measure - Description

1) Output: Total acreage where mosquito suppression activities occurred is subject to variance in weather patterns, seasonal flooding, characteristics, presence/absence of disease. 2) Outcome: Based on industry standard estimate methodology: 500,000 mosquitoes per surface acre of water multiplied by number of acres treated estimates mosquitoes prevented (to nearest whole number). 3) Efficiency: Total acreage treated per FTE. Five FTE were used to treat for mosquitoes in all reported years' calculations. 4) Output: On-site inspections stemming from rodent complaints received. Measures were refined to reflect industry standards.

## Legal/Contractual Obligation

Legal mandates are ORS 167, 452, 498, 506, and 634; OAR 635 and 603; 1968 Agreement City of Portland and Multnomah County – Title 13 and Title 8; MC 2011-129; NPDES General Aquatic Permit for Mosquito Control 2300A, Indoor Air Quality Act MC 21.500; 6 contractual mandates include grants, contracts, Federal, regional and local mandates.

## Revenue/Expense Detail

	Proposed General Fund	Proposed Other Funds	Proposed General Fund	Proposed Other Funds
Program Expenses	2013	2013	2014	2014
Personnel	\$957,761	\$0	\$936,528	\$0
Contracts	\$61,350	\$0	\$61,000	\$0
Materials & Supplies	\$124,840	\$0	\$100,167	\$0
Internal Services	\$172,738	\$0	\$193,983	\$0
Total GF/non-GF:	<b>\$1,316,689</b>	<b>\$0</b>	<b>\$1,291,678</b>	<b>\$0</b>
Program Total:	<b>\$1,316,689</b>		<b>\$1,291,678</b>	
Program FTE	10.50	0.00	9.90	0.00
<b>Program Revenues</b>				
Fees, Permits & Charges	\$500	\$0	\$500	\$0
Intergovernmental	\$235,166	\$0	\$235,166	\$0
Other / Miscellaneous	\$1,000	\$0	\$1,000	\$0
<b>Total Revenue:</b>	<b>\$236,666</b>	<b>\$0</b>	<b>\$236,666</b>	<b>\$0</b>

## Explanation of Revenues

Vector-borne Disease Prevention and Code Enforcement is funded by county general fund as well as with revenue from intergovernmental agreements with the City of Portland and other local and state jurisdictions that is recognized in the general fund.

County general fund: \$1,055,012  
 City of Portland Bureau of Environmental Services: \$224,000  
 Agreements with other state/local jurisdictions: \$11,166  
 Fees from permits and fines: \$1,500

## Significant Program Changes

**Last year this program was:** #40008, Vector-Borne Disease Prevention and Code Enforcement

The Vector Control and Code Enforcement programs will experience overall decrease in contracted revenue from Washington County as they have elected to provide services to their residents through Washington County Health Department. Program FTE were reduced to accommodate the revenue reduction and personnel cost increases that were primarily a result of COLA and step increases. This change and a reduction in materials and supplies will result in reduced acreage controlled/surveyed for vectors and their disease, such as various municipal parks and K-12 schools in Multnomah County. Rodent control inspections to the citizens of Multnomah County will be limited to approximately one consultation visit, and education and outreach will be prioritized and reduced. The Oregon State Fair project and ad hoc education and outreach will be performed as staffing allows.

The Vector Control and Code Enforcement programs will use the input from their citizen advisory committee, program staff and management to prioritize core functions as best as possible to minimize impacts to clients/staff. Plans include the following: a) assure revenues match costs for services for all contracts and promote new contracts where possible; b) mosquito control/surveillance will prioritize services to focus on areas of the county that have the largest impact/risk of vector-borne disease, and c) a limit will be set for the provision of rodent control materials at a single address.