

Program # 40008 - Vector-borne Disease Prevention and Code Enforcement

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Lead Agency: Health Department Program Contact: WIRTH Chris M

Program Offer Type: Existing Operating

Related Programs:

Program Characteristics:

Executive Summary

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 animals to humans. The major emerging diseases are vector borne (WNV, avian influenza, SARS). Current analysis of evidence shows that environmental indicators such as dead birds predict the prevalence of human cases of West Nile virus in a community. Although no positive cases of WNV occurred in Multnomah County in 2009, 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

Objectives: Collection and identification of mosquitoes, birds and rats. Monitor for and respond to emerging vector borne diseases such as H1N1 and West Nile Virus. Perform laboratory analysis on rats and mosquitoes to determine which species carry the 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 unspecified animals (e.g., bees, livestock, and birds). Multnomah County (MC) climate supports ideal mosquito and rat habitats. International airport and shipping along with migratory bird flyways provide avenues for new diseases to enter the community. Mosquito control began in MC in the 1930's when malaria was endemic. Although no WNV cases occurred in MC in 2009, six counties in Oregon reported twelve WNV human cases and 13,300 infected mosquitoes; the largest detection of collected mosquitoes since the arrival of WNV in Oregon in 2004. 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 current survey in the MC rat population is showing Toxoplasmosis (Cat Box Fever) in 6% of the rat population. Results of this research are expected to be published within the next year. Vector control protects the community by serving all populations, while focusing on the vulnerable (i.e. elderly, children, homeless). The citizenry understand and expect these program functions.

Performance Measures

Measure Type	Primary Measure	Previous Year Actual (FY08-09)	Current Year Purchased (FY09-10)	Current Year Estimate (FY09-10)	Next Year Offer (FY10-11)
Output	Number of acres treated for mosquitos	5,560	3,308	3,500	3,500
Outcome	Mosquitoes prevented (In millions)	2,780	1,054	1,750	1,750
Efficiency	number of acres treated for mosquito per FTE	1,112	662	700	700
Output	number of rodent inspections conducted	905	1,170	905	905

Performance Measure - Description

Output: Total acreage where mosquito suppression activities occurred and 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 X number of acres treated estimates mosquitoes prevented (to nearest whole number). 3) Efficiency: Total acreage treated per one FTE. 4) Output: On-site inspections stemming from rodent complaints (i.e. rat in toilet 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; 9 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	2010	2010	2011	2011
Personnel	\$846,451	\$0	\$912,590	\$0
Contracts	\$68,200	\$0	\$73,150	\$0
Materials & Supplies	\$102,397	\$0	\$86,653	\$11,097
Internal Services	\$240,769	\$0	\$189,035	\$903
Total GF/non-GF:	\$1,257,817	\$0	\$1,261,428	\$12,000
Program Total:	\$1,25	57,817	\$1,273,428	
Program FTE	10.45	0.00	10.65	0.00
Program Revenues				
Indirect for dep't Admin	\$0	\$0	\$714	\$0
Fees, Permits & Charges	\$500	\$0	\$2,500	\$0
Intergovernmental	\$238,666	\$0	\$236,666	\$12,000
Other / Miscellaneous	\$1,000	\$0	\$1,000	\$0
Total Revenue:	\$240,166	\$0	\$240,880	\$12,000

Explanation of Revenues

General fund revenue from intergovernmental agreements with City of Portland and other local and state jurisdictions.

Significant Program Changes

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