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COMMUNITY HEALTH ASSESSMENT IN THE CALABASAS BIRD STREETS AREA

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This report is prepared in response to a request by the Los Angeles County Board of Supervisors for the Department of Health Services (DHS) to investigate concerns of unusually high rates of cancer and general mortality among individuals living in the Bird Streets area of Calabasas. This report will be presented in two parts—with the first addressing concerns about cancer, and the second addressing general mortality (including cancer mortality) concerns.

CANCER ANALYSIS:

The data for the cancer analysis was obtained from information made available by the Los Angeles County Cancer Surveillance Program (CSP)—the official registry for all cases of cancer occurring in Los Angeles County residents. Because the registration of every cancer diagnosed within the state of California is required by law, the reporting of cancers to CSP is estimated to be nearly 100 percent complete for all diagnoses since 1971.¹

The cancer analysis was performed utilizing descriptive data from CSP contained within *Cancers in the urban environment: patterns of malignant disease in Los Angeles County and its neighborhoods (2004)*. This text presents the results of comprehensive statistical analyses on CSP data, summarizing the geographic distribution of 84 categories of malignancy occurring

within Los Angeles County over a 26-year period (1972-1998). For purposes of this report, maps were visually analyzed for the occurrence of each type of cancer within the census tract encompassing the Bird Streets area (1990 U.S. Census Tract 8001.00).

Results:

Analyses of maps revealed that males are at an increased risk for germ cell malignancies and mesothelioma in the census tract encompassing the Bird Streets area. The development of germ cell malignancies (e.g., testicular cancer) is thought to be caused in part by genetic factors and has not been shown to be linked to a toxin in the physical environment.¹ Mesothelioma has been shown to be associated with an environmental toxin, however, this type of cancer most often occurs when exposures are higher and for periods longer than what would normally occur in communities. The most well-established cause for this type of cancer is chronic exposure to various forms of asbestos in an occupational setting (approximately 70-80 percent of all cases).¹
² Overall, these results do not provide evidence of an increased risk of the types of cancers shown to be linked to toxins in the physical environment (outside of in the workplace), in the census tract encompassing the Bird Streets area.

Per the request of the community, a second portion of the cancer investigation was to include the gathering of detailed information on current cancer cases within the Bird Streets area. Community members initially volunteered to collect this information through the use of a cancer case reporting form developed by DHS staff. Community representation later declined to proceed with this part of the investigation. However, based on results of analyses of existing data, it is unlikely that this piece would have provided additional information above and beyond what is already presented in this report.

MORTALITY ANALYSIS:

The data for the mortality analysis were obtained from information on registered death certificates in Los Angeles County, which is maintained in the Automated Vital Statistics System (AVSS) by DHS, Data Collection and Analysis Unit. Since registration of death certificates is required by law, the reporting of deaths to AVSS is nearly 100 percent complete.

The mortality analysis was performed with 1996-2002 death certificate data from each of three areas: the Calabasas Bird Streets area (2000 U.S. Census Tract 8001.01, Block 3), the adjacent Calabasas/Woodland Hills area [2000 Census tracts 8001.01 (Blocks 1 and 2), 8001.02, 8002.01, 8002.02, 1374.02], and all of Los Angeles County combined. The leading causes of death in each area were determined by analyzing data on the listed underlying cause in the medical portion of each death certificate. "Underlying cause of death" is defined as the disease or injury initiating the sequence of events leading directly to death. Cumulative age-adjusted mortality rates were standardized to the population age distribution of the 2000 U.S. Census.

Results:

Table 1 presents the five leading causes of death in the three areas. Heart disease and cancer were the leading causes of death in the Bird Streets area, the adjacent Calabasas/Woodland Hills

area, and Los Angeles County overall. The heart disease mortality rate was higher in the Bird Streets area (335 per 100,000) than in the adjacent Calabasas/Woodland Hills area (240 per 100,000) and in the County overall (265 per 100,000). The cancer mortality rate was lower in the Bird Streets area than in both the adjacent Calabasas/Woodland Hills area and the County overall. For all other causes of death, small numbers (<10 deaths) in the Bird Streets area produced statistically unstable rates which did not allow for comparison with the other regions.

Overall, these results do not provide evidence of excess mortality or unusual patterns of mortality during the period 1996-2002, among persons living in the Calabasas Bird Streets area. Heart disease mortality was higher in the Bird Streets area, as compared to rates in adjacent areas and countywide rates. However, it should be noted that environmental toxins are not a major contributor towards heart disease mortality, relative to other factors such as genetics, tobacco use, diet, and physical inactivity.

These analyses do not adjust for a variety of factors which influence mortality, including individual differences in genetics and lifestyle, as well as regional demographic differences. The Calabasas Bird Streets area represents a unique population within Los Angeles County. For example, residents in the Bird Streets tend to be older (48% are over the age of 45, versus 29% in Los Angeles County). Also, the majority of residents in the Bird Streets are White (92%, versus 49% White in Los Angeles County). These differences in demographics may imply other, more subtle regional differences, not adjusted for in these analyses. Accordingly, results of these analyses should be interpreted with caution.

Table 1. Number and Rate¹ of Death by Leading Causes, Calabasas Bird Street Area, Adjacent Calabasas/Woodland Hills Area, and Los Angeles County, 1996-2002.

	Bird Streets ²		Surrounding CT ³		Los Angeles County	
	Number	Rate ¹	Number	Rate ¹	Number	Rate ¹
All Causes	87	780	1220	735	416,685	787
<u>Leading Causes of Death:</u>						
Diseases of heart	34	335	385	240	136,769	265
Cancer	24	129	315	171	93,644	176
Stroke	5	NR	109	70	29,422	57
Emphysema and other chronic respiratory diseases	4	NR	47	30	19,927	37
Influenza & Pneumonia	3	NR	53	35	19,558	37

¹ Per 100,000 persons, age-adjusted, and based on an annual average of deaths over seven years.

² 2000 Census Tract 8001.01, Block 3.

Corresponding area in 1990 Census Tract 8001.00.

³ 2000 Census Tracts: 8001.01 (Blocks 1 and 2), 8001.02, 8002.01, 8002.02, 1374.02.

Corresponding areas in 1990 Census Tracts: 8001.00, 8002.00, 1374.02.

NR: The number of observed deaths is too small (less than 10) to produce a reliable rate.

REFERENCES

1. Mack, T. *Cancers in the urban environment: patterns of malignant disease in Los Angeles County and its neighborhoods*. Boston: Elsevier Academic Press (2004).
2. National Cancer Institute. (May 2002). *Mesothelioma: Questions and Answers*. Retrieved January 6, 2006 from the World Wide Web: http://cis.nci.nih.gov/fact/6_36.htm.