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FISCAL IMPACT REPORT

SPONSOR: Regensberg DATE TYPED: 3/03/03 HB 717
 SHORT TITLE: Las Vegas Cancer Occurrence Cluster Study SB _____
 ANALYST: Dunbar

APPROPRIATION

Appropriation Contained		Estimated Additional Impact		Recurring or Non-Rec	Fund Affected
FY03	FY04	FY03	FY04		
	\$1,000.0			Non-Recurring	General Fund

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

Responses Received From
 Department of Health (DOH)
 Health Policy Commission (HPC)

SUMMARY

Synopsis of Bill

House Bill 717 appropriates \$1,000,000 from the general fund to the Department of Health to fund a study of the frequency and locations of occurrence of cancer cases in Las Vegas, New Mexico, and the immediate surrounding area.

Significant Issues

HB 717 aims to study “cancer clusters.” In general, the term “cancer cluster” implies that a greater number of cancer cases have occurred in a specific geographic region or in a specific time period than what would be expected. Typically, the public perception is that the cancers are caused by some common exposure, such as an environmental contaminant, and this is the rationale for studying them.

Cancer cluster reports present great challenges to public health departments nationwide. In the vast majority of cases, the cancer “clusters” do not turn out to be clusters at all. A survey of 41 state health departments in 1996 showed that, of the 1,900 cancer cluster inquiries logged, less than 10% showed a true excess of cancer. Of that small percentage, only a handful led to discoveries of preventable causes of cancer.

Response to cancer cluster concerns requires collaboration with state and local agencies. Within state health departments, both environmental epidemiology and comprehensive cancer programs need to be involved. Expertise on occupational exposures and disease is often required. Population-based cancer registries are also an essential tool to address cancer cluster concerns. .

FISCAL IMPLICATIONS

The appropriation of \$1,000.0 contained in this bill is a non-recurring expense to the general fund. Any unexpended or unencumbered balance remaining at the end of FY 04 shall revert to the general fund.

At this stage, an appropriation may be premature. DOH suggests that an investigation should begin by determining whether reported cancer clusters are in fact clusters. This could be accomplished for a fraction of the amount requested in the bill, perhaps on the order of \$10.0 to \$20.0. Depending on the results of such an initial investigation, a major study of possible causes, and ways to ameliorate or prevent them, might be warranted.

ADMINISTRATIVE IMPLICATIONS

The approval/establishment of 1.0 FTE would be necessary to provide oversight if HB 717 is passed, and if epidemiological assessment determines such a study is warranted.

OTHER SUBSTANTIVE ISSUES

The Office of Epidemiology, of the New Mexico Department of Health and the New Mexico Tumor Registry (NMTR) at the University of New Mexico Health Sciences Center formed a Cancer Incidence Review Group five years ago to pool resources and coordinate activities when responding to cluster inquiries. The group reviewed materials and recommendations from other health departments and the Centers for Disease Control and Prevention, and developed cluster response materials and protocols.

The group meets as needed to review cancer inquiries. The group leaders are the Deputy and Assistant Deputy State Epidemiologist, and the Chronic Disease Medical Epidemiologist. The NMTR provides expertise acquired over 25 years of tracking and studying cancer in New Mexico. It provides technical assistance to the DOH Cancer Control Program Epidemiologist in assessing the data, to determine whether or not there is an excess of cancer. The Office of Epidemiology provides expertise regarding exposures, logs inquiries as they come to DOH.

The group works closely with community health leaders to identify concerns and gather initial information. It communicates progress and findings to the community, and can call on other agencies as needed. It aims to be responsive to communities' concerns, allaying fears and taking the opportunity to educate on the best practices for identifying and preventing cancer.

DOH states that an initial investigation would identify the specific types of cancers that have occurred. In some cases, a "cluster" turns out to include cancers of several different types, known to have different causes. An initial investigation would also examine the numbers and the patterns of occurrence of the cancer, in relation to what might be expected by chance alone. Only then could it be determined whether there is actually a cluster, and thus a need to follow up with

a major study. Even if no cluster can be identified, follow-up with the community would be essential to educate community members and explain the results.

Scientific investigations of cancer clusters may take years to complete, and the findings are often inconclusive. These investigations occasionally identify important public health problems, but unless the disease is extremely rare, highly unusual in a particular group, or previously unknown, determining a clear cause and effect is very rare.

Nevertheless, the perception that there is a cancer cluster can have a devastating impact on individuals, families, and communities. From a public health perspective, this perception may be as important as, or more important than, an actual cluster. Public concern increases quickly when people think there is a cancer cluster in their community and that they and/or their children will be harmed. These situations deserve prompt and effective public health attention. Regardless of outcome, the investigation process can provide opportunities for public education for cancer risks and prevention. It is also a chance to build community support for public health efforts.

According to DOH, the one-year timeframe specified by HB717 would be too short to develop and complete a major, in-depth study such as HB717 would call for. However, one year would most likely be adequate for a more modest, initial investigation.

The HPC provided the following information pertaining to cancer cases in the San Miguel county area:

- According to the NM Tumor Registry at the UNM Health Sciences Center, there are an average of:
 - 6,000 new cancer cases diagnosed in NM per year
 - 16 new cases per day
 - 2,600 cancer deaths per year
 - 7 cancer deaths per day
- From 1991-2000, according to the Tumor Registry, there were an average of 92 new cases of cancer per year in San Miguel County, population 28,058. Other NM counties of comparable population size had:
 - Cibola, pop. 25,281 = 75 new cases per year
 - Grant, pop. 30,159 = 134 new cases per year
 - Taos, pop. 25,608 = 95 new cases per year
- According to 2001 Hospital Inpatient Discharge Data (HIDD) collected by the Health Policy Commission, the Las Vegas (zip code 87701) had 91 persons identified with cancer, with 132 persons identified with cancer throughout San Miguel County.
- From 1998 to 2000, the rate of hospitalization per 1,000 people for cancer was:

Year	San Miguel	New Mexico
1998	4.5 per 1,000	4.8 per 1,000
1999	4.9 per 1,000	4.7 per 1,000
2000	5.2 per 1,000	4.6 per 1,000

(HPC 2000 HIDD Report)

- The differences between the HIDD data and the Tumor Registry data are likely in the methods that hospitals use to classify and report hospital discharges to the Health Policy Commission. In addition, HIDD data reflects hospital utilization – many people with cancer utilize a variety of non-inpatient care options.
- Residents of Las Vegas who live in proximity to a diesel-powered turbine used for electrical generation have strong concerns about the rate of cancers in their West Las Vegas neighborhood. (Wren Propp, “Las Vegas Residents Detail Opposition to PNM Turbine.” Albuquerque Journal, 11/14/2002).
 - Community activists, in the area surrounding the diesel generator, have counted 52 cases of cancer.
 - No official studies have been performed to document the incidence or causes of cancer in relationship to the generator.
 - Neighborhood complaints about the PNM generator also include noise nuisance levels.
 - Cancer concerns are based on particulates and waste gasses emitted during the diesel combustion process. According to the Journal article, information obtained from the Environmental Protection Agency permit process for the generator shows that its by-products include 2.7 tons of nitrogen oxides and 3 tons of particulates per day of operation.
 - The generator, built in 1972 and operated by Public Utilities of New Mexico (PNM), is not the primary source of electricity for the Las Vegas area. According to the comments made by PNM to the Albuquerque Journal, the generator does not run 24 hours a day, 365 days per year.
- According to the US Public Interest Research Group, diesel combustion emits a mixture of gases and fine particles that contain some 40 chemicals, including benzene, butadiene, dioxin, and mercury compounds. Fine diesel particulates may increase the risk of cancer.
- A 1999 study conducted by the Department of Health found that there were no increased levels of cancer among employees of Las Vegas Medical Center. The study was undertaken in response to concerns voiced by union representatives about the past presence of asbestos at the facility.

BD/yr