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## FISCAL IMPACT REPORT

SPONSOR Wirth DATE TYPED 2/15/05 HB HJM 25

SHORT TITLE Study Mercury Amalgam Dangers SB \_\_\_\_\_

ANALYST Hanika-Ortiz

### APPROPRIATION

Appropriation Contained		Estimated Additional Impact		Recurring or Non-Rec	Fund Affected
FY05	FY06	FY05	FY06		
			See Narrative		

### SOURCES OF INFORMATION

LFC Files

#### Responses Received From

Department of Health (DOH)

Health Policy Commission (HPC)

New Mexico Environment Department (NMED)

### SUMMARY

#### Synopsis of Bill

HJM 25 requests the DOH to evaluate risks associated with mercury amalgam tooth fillings and develop recommendations for public informational materials. This study is to include a review of the scientific literature as well as a review of other states' regulations. DOH is to report its findings and recommendations to the Health and Human Services Committee in October 2005.

#### Significant Issues

The DOH reports even very low levels of mercury exposure can pose a concern, particularly for pregnant women, infants, and children. Mercury is a neurotoxin at very low levels with the developing fetus at particular risk and young children also at risk for neuromuscular, neurobehavioral and learning disorders. Many of the adverse effects of mercury are reversible; therefore, minimizing or eliminating certain exposures can have a beneficial effect on the exposed individual. Dental amalgam fillings are comprised of about 50% mercury and are a known source of mercury exposure.

The NMED has the following comments:

The mercury content of new amalgams has generally decreased in recent years (silver is the primary metal used in dental amalgam now) but the Environmental Protection Agency (EPA) has nevertheless determined that old and removed dental amalgam can be a significant source of mercury exposure to the public.

Mercury is an elemental substance and can be easily released into the environment. It can be readily transferred from soil to air and water and back again. Because vapor emitting from amalgam restorations can be absorbed by the patient through inhalation, ingestion, or by other means, concerns have been raised about possible toxicity.

Numerous environmental concerns exist regarding its proper usage and disposal practices. Although many recycle and reuse programs are available, and alternative mercury-free substitutes for dental restorative work are widely available, the practice of amalgam disposal via the sewage system and incineration continues. It is estimated that 27% of old dental amalgam restorations are lost down the sewage drains.

While mercury-contaminated streambed sediments in ground and surface water in New Mexico is not uncommon, it is due primarily to atmospheric fallout from coal-fired power plant emissions. Moreover, the primary ingestion mode of mercury by humans is consumption of fish, not drinking of contaminated water.

## **PERFORMANCE IMPLICATIONS**

The HPC agrees a research program is needed to fill in as many gaps as possible in current knowledge about the potential long-term biological effects of dental amalgam and alternative restorative materials.

## **FISCAL IMPLICATIONS**

HPC reports there is scant evidence that the health of the vast majority of people with amalgam is compromised, nor that removing amalgam fillings has a beneficial effect on health. It also recognized that a total conversion from dental amalgam to alternative materials would cause a significant increase in U.S. health care costs.

## **ADMINISTRATIVE IMPLICATIONS**

NMED should participate in the DOH study on mercury amalgam dangers.

## **OTHER SUBSTANTIVE ISSUES**

The HPC reports the U.S. Public Health Service believes it is inappropriate at this time to recommend any restrictions on the use of dental amalgam, for several reasons. First, current scientific evidence does not show that exposure to mercury from amalgam restorations poses a serious health risk in humans, except for an exceedingly small number of allergic reactions. Second, there is insufficient evidence to reassure the public that components of alternative restorative materials have fewer potential health effects than dental amalgam including allergic-type reactions. Third, there are significant efforts underway in the U.S. to reduce the amount of mercury in the

environment. And finally, as stated previously, amalgam use is declining due to a lessening of the incidence of dental caries and the increasing use of alternative materials.

**WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL?**

New Mexico citizens may not be able to make as informed a choice in using dental amalgam as a restorative material.

**QUESTIONS**

Do mercury free substitutes for dental restorative work last as long or protect as well as amalgam fillings? What is the cost difference?

**AHO/lg**