

Department of Legislative Services
Maryland General Assembly
2007 Session

FISCAL AND POLICY NOTE

Senate Bill 902 (Senator Middleton)
Education, Health, and Environmental Affairs

Public Health - Mercury-Free Vaccines - Requirements

This bill requires that beginning January 1, 2009 an individual must be vaccinated with a vaccine that contains less than 1.25 micrograms of mercury per 0.5 milliliter dose unless a vaccine that meets this requirement is not readily available or appropriate.

Fiscal Summary

State Effect: The bill primarily alters the purposes for which existing funds may be used. Any administrative changes could be handled by the Department of Health and Mental Hygiene (DHMH) within existing resources.

Local Effect: None.

Small Business Effect: None.

Analysis

Current Law: The Secretary of Health and Mental Hygiene must devise and institute the means to prevent and control infant mortality and diseases of pregnancy, childbirth, infancy, and early childhood. The Secretary also must promote the welfare and hygiene of maternity and infancy.

Immunization against certain diseases is required for a student to be admitted and stay in a public or private school. A parent or guardian must provide the school with evidence that a child received the age-appropriate immunizations following the immunization schedule recommended by the Subcommittee on Immunizations and Infectious Diseases

of the Medical and Chirurgical Faculty of Maryland and the Secretary of Health and Mental Hygiene. A student is exempt from these immunization requirements if the parent or guardian objects on the grounds that the immunization conflicts with the parents' or guardian's bona fide religious beliefs and practices.

Background: The Food and Drug Administration (FDA), the Agency for Toxic Substances and Disease Registry (ATSDR), and the Environmental Protection Agency (EPA) have mercury exposure guidelines of what mercury levels are thought to be safe. These standards are based on methylmercury research, rather than ethylmercury, because methylmercury is more easily bound to tissue, remains there a longer time, and is believed to be more toxic, according to the Centers for Disease Control and Prevention (CDC).

Thimerosal, a preservative used in some vaccines and other products, contains approximately 49% ethylmercury. There is no direct causal evidence that thimerosal in vaccines harms individuals, other than causing reactions such as redness and swelling where the injection occurs, CDC states. Vaccines with trace amounts of thimerosal contain one microgram or less of mercury per dose.

The Institute of Medicine's Immunization Safety Review Committee reported October 1, 2001 that scientific data is inadequate to determine whether or not there is a causal relationship between thimerosal in childhood vaccines and neurodevelopmental disorders such as autism, attention deficit hyperactivity disorder, and speech or language delay.

In 1999, FDA reviewed the use of thimerosal in childhood vaccines. FDA found that a child's cumulative mercury exposure from recommended vaccines was within acceptable limits set by FDA, ATSDR, and the World Health Organization. At the same time, FDA learned that, depending on the vaccine formulations and the infant's weight, the cumulative mercury exposure during a child's first six months could exceed the EPA's recommended guidelines for methylmercury. In response, the Public Health Service and the American Academy of Pediatrics urged vaccine manufacturers to reduce or eliminate thimerosal in vaccines.

Thimerosal was removed from or reduced to trace amounts in all vaccines recommended for children six years old and younger, except for the inactivated influenza vaccine, according to the FDA's Center for Biologics Evaluation and Research. A preservative-free inactivated influenza vaccine, which contains a trace amount of thimerosal, is available in limited supply for children and pregnant women. CDC advises that certain tetanus-diphtheria vaccines given to children age seven and older contain thimerosal as a preservative.

State Fiscal Effect: DHMH's Community Health Administration (CHA), in conjunction with the relevant health occupations boards, could alert the health care practitioners that administer vaccines and the vaccine suppliers regarding the bill's requirements using existing budgeted resources. The bill would not result in increased costs to purchase vaccines because the bill allows vaccines with more than the specified amount of mercury to be used if the required vaccine is not readily available or appropriate.

CHA purchases influenza vaccines for children receiving Medicaid and receives federal funds to do so. Legislative Services assumes that if DHMH were faced with purchasing a more expensive mercury-free vaccine for children receiving Medicaid using general funds because of a loss of federal Medicaid funds due to noncompliance with federal recommendations, the bill's exemption could apply. Under the bill's exemption, DHMH conceivably could purchase the lower cost vaccine that contains more than the specified amount of mercury.

Additional Information

Prior Introductions: A similar bill, SB 365 of 2006, was amended and passed by the Senate and had a hearing in the House Health and Government Operations Committee but no further action was taken. Its cross file, HB 394, had a hearing in Health and Government Operations but no further action was taken. HB 86 of 2005 would have prohibited an individual under the age of three or a woman known to be pregnant from being vaccinated with a vaccine, or injected with a product, that contains mercury or other heavy metals. The bill received an unfavorable report by Health and Government Operations.

Cross File: None.

Information Source(s): Department of Health and Mental Hygiene; Food and Drug Administration; Mercury & Thimerosal, National Immunization Program, Centers for Disease Control and Prevention; CDC Vaccine Price List; Department of Legislative Services

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