To: **Senate Environment, Education and Energy Committee**

Bill: **SB 723 Baby Food - Toxic Heavy Metals - Testing and Labeling**

Date: **February 29, 2024**

Position: **Support**

The Maryland Nurses Association (MNA) supports *Senate Bill 723 – Baby Food – Toxic Heavy Metals – Testing and Labeling.*

This bill requires manufacturers of baby food sold in Maryland to test their product for toxic heavy metals, to post the results on the manufacturer's website, and to list on product labels that the product has been tested for lead, mercury, cadmium, and arsenic. In the absence of actionable federal regulations on heavy metals in baby food, this bill is an important step forward in protecting the health and well-being of our most vulnerable population: infants and toddlers younger than two years old. The first few years of a child's life are a critical period of development when exposure to harmful substances can affect development and the health of the child for the rest of their life. Exposure to heavy metals affects many organ systems, causes a wide variety of health problems, and damages the developing brain. This in turn leads to a wide range of societal impacts, and with a significant financial burden to our educational, criminal, and social support systems.

The Centers for Disease Control and Prevention (CDC) has said “there is no safe level of lead” in the body. Even very low levels can have negative and irreversible health effects, especially in children. Childhood lead exposure can damage the brain and nervous system, cause learning and behavior problems, and lead to hearing and speech deficits. Decades of research have established a clear relationship between elevated blood lead levels and lower IQ. Furthermore, medical and economic research show a strong connection between early childhood lead exposure and later violent criminal activity.

The health effects of mercury exposure vary, depending on the type of mercury, the amount ingested, and the age of the person. The type of mercury typically found in baby food is organic methylmercury naturally occurring in rice. Methylmercury exposure can impair learning and memory, and lead to sensory, and movement problems. All forms of mercury can affect the nervous system and the kidneys.

The primary source of cadmium exposure (for nonsmokers) is from the food supply. Foods that commonly contain high levels of cadmium, and may be found in baby food, include potatoes, grains, and leafy vegetables such as spinach. According to the federal Agency for Toxic Substances and Disease

Registry (ATSDR), the health effects from exposure to toxic levels of cadmium include kidney damage, respiratory problems, and decreased bone density.

Arsenic is naturally found in soil, water, food, and air. Since children tend to eat a narrower variety of foods than adults do, ingestion of food made with arsenic-contaminated water may represent a significant source of exposure. The physical effects of arsenic exposure include irritation of the stomach and intestines, blood vessel damage, skin changes, and neurological damage. There is also some evidence that long-term exposure to inorganic arsenic in children may result in lower IQ scores, and that exposure in early life may increase mortality in adulthood. Lead, mercury, cadmium, and arsenic exposure increase the risk of certain cancers.

As if these health impacts weren't enough, there are significant societal and financial repercussions from childhood exposure to toxic heavy metals. The consequences of lead exposure have been studied extensively and were summarized by the Pew Policy Institute. Pew calculated the economic impact of lead exposure across the U.S. and estimated that the cost to society at $192 - 270 billion per birth cohort; that is, children born each year and their lifetime health and economic effects. Pew examined 5 broad categories: (1) health care, (2) IQ loss, (3) increased special education needs, (4) lower earnings, and (5) behavior problems and crime. The authors of the Pew report estimate the costs to society at:

- Total health-related costs of elevated lead levels for children born in any given year are estimated to be between $10.8 and $53.1 million.
- Loss of IQ points results in lifetime earnings losses of $165 to $233 billion.
- Lead-exposed children may have delayed cognitive and behavioral development and need special education services. These interventions cost an estimated $30 to $146 million over the lives of all children born in a single year. Research has also estimated the cost of childhood lead exposure and ADHD at $267 million in medical treatment and parental work loss.
- Economic research shows that lead-poisoned children have decreased earning potential across their lifespan, resulting in associated tax revenue losses estimated at $25 to $35 billion per cohort.
- Lead exposure in early life is strongly associated with behavioral problems and later involvement with the criminal justice system. The direct costs of lead-related crime, (for the victims, the criminal justice system, and workers who lose earnings) is estimated at $1.7 billion.

We have the opportunity now to limit the number of children in Maryland exposed to hazardous heavy metals in baby food, to protect their health and to reduce the economic burden in our state.

We ask for a favorable vote. If we can provide any additional information, please contact Robyn Elliott at relliott@policypartners.net.

References:

1. Lead FAQs | Lead | CDC
2. Mercury | ToxFAQs™ | ATSDR (cdc.gov)
3. Cadmium | Toxicological Profile | ATSDR (cdc.gov)
4. Arsenic Toxicity: Physiologic Effects of Arsenic Exposure | Environmental Medicine | ATSDR (cdc.gov)
5. Costs-of-lead-poisoning-brief_web.pdf (pewtrusts.org)