Green & Healthy Homes Initiative®

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Delegate Shane E. Pendergrass, Chairman
Health and Government Operations Committee
House Office Building, Room 241
6 Bladen Street, Annapolis, Maryland 21401

Re: **OPPOSE**– HB921 – DENTISTS – SALIVA LEAD POISONING SCREENING TESTS – SCOPE OF PRACTICE AND REQUIREMENTS

Dear Chairman Pendergrass and Members of the Committee:

The Green & Healthy Homes Initiative ("GHHI") writes to ask you to **OPPOSE HB921** as the focus of MDH staff and state lead testing resources should be on Maryland's universal blood lead testing initiative of young children at 12 and 24 months as well as other blood lead testing of children under age 6. In the alternative, if the Committee deems it beneficial to pursue further study of saliva lead testing of children in Maryland, GHHI would not oppose that research. GHHI has a long-standing history of providing services to and advocating for families and children across the country to identify and eradicate sources of lead exposure. We recognize that increased methods for screening has the potential to help advance this mission, however we believe there is not enough evidence to suggest using saliva samples to test for lead poisoning is an effective screening method. We believe that further evaluation would be needed to determine whether testing for lead poisoning in saliva, as outlined in this bill, represents best practices for the protection of children in our state.

Further Consideration is Needed to Understanding Saliva Tests as a Potential Diagnostic Tool.

HB921 would enable saliva to be collected in order to screen for lead poisoning. The bill does not explain whether a positive result for a saliva test should be used as a new diagnostic standard, or whether it would need to be confirmed with a blood test. While there have been some scholarly studies examining saliva testing results as compared to blood testing results, our organization has not found research examining whether certain levels of lead in saliva indicate the presence of negative health effects associated with lead poisoning.[1]

There is evidence suggesting that a high percentage of saliva samples that test positive for lead poisoning will test negative with a blood test. This could suggest that there is a level of lead exposure captured in saliva testing that is not captured in blood tests. From this arises questions of whether blood testing should remain the gold standard or whether saliva testing should be used as a diagnostic too. Further research is needed to determine the association of negative health effects of lead poisoning in patients that test positive for lead poisoning with a saliva sample but negative with a blood sample.

The current legislation does not explicitly describe whether saliva tests should be used as a screening tool that requires a confirmatory blood test, or whether a positive saliva test should be considered as a lead poisoning diagnosis. This could lead to considerable confusion amongst practitioners and service providers.

Further Consideration is Needed to Understand the Usefulness of Saliva Testing as a Screening Tool

If Saliva testing is to be used as a screening tool while maintaining blood tests as the gold standard for lead poisoning diagnoses (because there is not, to our knowledge, evidence to support links between saliva lead levels and neurological damage), then an analysis of the usefulness of saliva testing as a screening tool is also needed. The main benefit of saliva testing is that it is less invasive than a blood test. Allowing for dentists to test for lead would also represent an additional route of access to lead testing and could improve testing rates if implemented effectively. However, if blood tests are to remain the standard for lead poisoning diagnoses, a positive salvia test would still require an invasive venous blood draw in order to confirm the results.

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[1] Gardner, Sher Lynn, et al. "Evaluating Oral Fluid as a Screening Tool for Lead Poisoning." *Journal of Analytical Toxicology* (2016). pp. 744-748. Retrieved from: https://academic.oup.com/jat/article/40/9/744/2527450

Because research shows that it is not common for a patient to test negative for lead poisoning with a saliva sample and positive with a blood sample, a saliva test could be used to rule out the need for any type of blood test, and in cases where a patient tests negative for lead in saliva, could potentially prevent a patient from receiving an invasive blood test.

Still, this should be considered alongside the fact that point of care (POC) blood lead testing involves a minimally invasive finger prick. A saliva test would most likely be able to take the place of these POC blood tests. However, the POC blood tests have the advantage of instant results, meaning that any follow-up care or case management can be handled within one doctor visit.

Saliva samples must be sent to a laboratory in order to have a lead test conducted. The bill proposes the results should be sent to the patient's guardian and to the Maryland Department of the Environment. While the saliva test is marginally less invasive than the capillary finger prick, this should be weighed against the additional time required for processing a saliva test. This additional time equates to longer possible time of exposure and greater possibility of the patient being lost to follow-up and case management services.

Further Consideration is Needed to Determine Whether This Legislation Represents the Best Methods for Implementing Saliva Testing for Lead

Currently, lead testing and education is primarily happening in the office of a child's pediatrician rather than their dentist. Because this is the case, further research is needed to determine whether it would be more effective to enable pediatricians, rather than dentists, to test patients for lead poisoning by collecting saliva samples. An analysis of best practices should consider whether any healthcare providers in other jurisdictions have successfully implemented saliva samples as a method for lead testing.

WE ASK YOU TO OPPOSE HB921.

Respectfully Submitted,

Ruth Ann Norton
President and CEO