



DEPARTMENT OF ENVIRONMENTAL HEALTH AND ENGINEERING

**To:** 2022 Maryland General Assembly  
**Testimony on:** SB268 Pesticide Regulation – Transfer to Department of the Environment Bill  
**Position:** Favorable  
**Hearing Date:** February 2, 2022

We, Drs. Ana Maria Rule and Lesliam Quirós-Alcalá, would like to submit this written testimony **in favor of SB268**, which would transition Maryland’s oversight and regulation of pesticides from the Maryland Department of Agriculture (MDA) to the Maryland Department of the Environment (MDE). We are both Assistant Professors at the Johns Hopkins Bloomberg School of Public Health in the department of Environmental Health and Engineering with expertise in exposure science and environmental epidemiology. *The opinions expressed herein are our own and do not necessarily reflect the views of The Johns Hopkins University.*

As exposure scientists focused on research on environmental exposures among agricultural workers and other vulnerable populations, we have concerns related to how the State regulates pesticides that can pose deleterious effects in humans and wildlife.

***MDA has not prioritized public health when managing registration of pesticides.***

Although all states have the right to go beyond EPA’s registration process, MDA has failed to address the health impacts that pesticides pose on all life forms when registering pesticides in the state. The agency’s primary focus is the protection and promotion of farmers and not the oversight of toxic substances. In fact, despite mounting scientific evidence, MDA has previously opposed several pesticide-restricting laws passed by the Maryland General Assembly meant to protect public health, including the first-in-the-nation Integrated Pest Management (IPM) in Schools laws to protect the health of our children and school staff, a first-in-the-nation Pollinator Protection Act protecting pollinators, and a law to ban all uses of the pesticide chlorpyrifos, which can impact children’s development.

***Pesticides encompass a wide range of potentially harmful chemicals, including disinfectants whose use has dramatically increased during the Covid-19 pandemic, posing risks to public health.***

Most people are unaware that most of the disinfectants used during the Covid-19 pandemic are registered pesticides. Many disinfectants directly weaken the immune system and can adversely impact respiratory health, including among those with pre-existing respiratory conditions like asthma. It is also recognized that exposures to disinfectants have increased in essential worker populations, including health professionals, food workers, farmworkers, custodial workers, and other service sector workers as a result of the pandemic. This has led to an increased pesticide exposure burden on both worker populations and the population at large.

***Children and other vulnerable populations face unique health risks associated with pesticide exposures so greater oversight is needed to protect them.***

In the population at large, a particular concern is the rising widespread use of disinfectants in homes, schools, daycare centers, hospitals, nursing homes, office buildings, and other public locations. Children, in particular, spend >90% of their time in indoor spaces where these disinfectants and other pesticides may be applied and persist. This increases their risk of exposure to these chemicals and their potential adverse health effects. Children are uniquely vulnerable to the potential effects of pesticides, and chemicals in general, because they are still developing and have more opportunities for chronic exposure throughout their lifetime. Additionally, for children and marginalized populations of color already living in highly polluted areas, the use

DEPARTMENT OF ENVIRONMENTAL HEALTH AND ENGINEERING

of disinfectants may exacerbate their overall burden of exposures to toxic chemicals posing increased health risks.

Pesticides can affect the nervous, respiratory, and reproductive systems, as well as increase the risk of cancer and affect neurodevelopment. This is especially concerning for women of reproductive age, for the developing fetus, and children. Exposures among pregnant women are of concern as exposure to pesticides during pregnancy has been associated with increased risk of mental, motor, and behavioral problems in children. Notably, it is estimated that, on average, it costs twice as much to educate a child with learning or developmental disabilities in the U.S. compared to the costs associated with educating children without these disabilities. The detrimental health effects of pesticides place children and other vulnerable populations at a clear disadvantage, limiting their ability to become productive members of our society and resulting in economic consequences to the state and our nation.

***Transferring oversight of pesticide regulation to the Maryland Department of Environment is a prudent step towards protecting public health.***

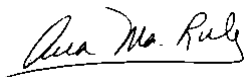
Passing the Maryland Pesticide Regulation – Transfer to Department of the Environment Bill, **is an urgently needed public health solution** to the widespread problem of toxic pesticide over-use in the state of Maryland that poses a risk to public health. MDE is uniquely qualified and positioned to oversee regulation of hazardous substances as the department:

- was created to protect and preserve the state's air, water, and land resources and safeguard the environmental health of Maryland's citizens,
- is responsible for enforcement of environmental laws and regulations, long-term planning, and research, and
- possesses the needed expertise to assess the level of safety and risks associated with pesticides and their impacts on the well-being of people, wildlife, and waterways based on the most current peer-reviewed scientific literature.

This bill would allow MDE to receive advice and counsel from the Maryland Department of Health for expertise on public health and safety, and from the MDA for expertise on the effectiveness of pesticides to kill target pests.

**In summary, by passing SB268**, this committee has the opportunity to truly protect the health of our citizens, including the most vulnerable, by allowing MDE to implement a more comprehensive approach to pesticide regulation and oversight.

Thank you for your consideration,



Ana Maria Rule, PhD, MHS  
Assistant Professor  
Environmental Health and Engineering  
Johns Hopkins Bloomberg School of Public Health  
615 N Wolfe St – E6614  
[arule1@jhu.edu](mailto:arule1@jhu.edu)



Lesliam Quirós-Alcalá, PhD, MSc  
Assistant Professor  
Environmental Health and Engineering  
Johns Hopkins Bloomberg School of Public Health  
615 N Wolfe St – E6616  
[lquiros@jhu.edu](mailto:lquiros@jhu.edu)



DEPARTMENT OF ENVIRONMENTAL HEALTH AND ENGINEERING

References.

- <sup>1</sup> <https://www.intechopen.com/chapters/37957>
- <sup>2</sup> <https://publications.aap.org/pediatrics/article/130/6/e1757/30399/Pesticide-Exposure-in-Children>
- <sup>3</sup> <https://pubs.acs.org/doi/10.1021/acs.chas.1c00026>
- <sup>4</sup> <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/nvap/NVAP-Reference-Guide/Cleaning-and-Disinfection/Regulation-of-Disinfectants>
- <sup>5</sup> [https://www.chesapeakebay.net/issues/chemical\\_contaminants](https://www.chesapeakebay.net/issues/chemical_contaminants)
- <sup>6</sup> <https://www.thenation.com/article/archive/warning-signs-how-pesticides-harm-young-brain/>
- <sup>7</sup> <https://pubmed.ncbi.nlm.nih.gov/26685281/>