

February 1, 2022

Honorable Kathy Hochul
Governor
New York State Capitol
Albany, NY 12224

Honorable Andrea Stewart-Cousins
President Pro Tempore and Majority Leader
New York State Senate
Albany, NY 12247

Honorable Todd Kaminsky
Chair, Senate Environmental Conservation
Committee
New York State Senate
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Honorable Carl Heastie
Speaker
New York State Assembly
Albany, NY 12247

Honorable Steven Englebright
Chair, Assembly Environmental Conservation
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Honorable Brad Hoylman
Chair, Senate Judiciary Committee
New York State Senate
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Honorable Gustavo Rivera
Chair, Senate Health Committee
New York State Senate
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Honorable Richard Gottfried
Chair, Assembly Health Committee
New York State Assembly
Albany, NY 12247

Dear Governor Hochul, Speaker Heastie, President Pro Tempore and Majority Leader Stewart-Cousins, and Chairs Englebright, Gottfried, Kaminsky, Hoylman, and Rivera:

The undersigned environmental health scientists and health professionals write to express our concerns regarding neonicotinoid pesticides, which present a variety of health risks to people—especially children. We strongly support [A7429/S699B](#), known as the Birds and Bees Protection Act, which would eliminate the unnecessary and harmful neonic uses that account for the vast majority of neonics entering New York’s environment.

Neonicotinoids, or “neonics,” are a class of neurotoxic insecticides commonly used in a wide variety of settings. They are so popular, in fact, that they are the most commonly used class of insecticides nationwide.¹ Neonics work by permanently binding to a cellular receptor, causing overstimulation of cells, and eventually paralysis and death of the exposed insect. Problematically, these same receptors populate the cells of the brain and nervous system across species—including people—prompting concern that neonics pose potentially serious risks to human health.²

While more research is needed to fully understand the health effects of neonics, there is already enough evidence to warrant taking action to reduce neonic exposures:

(1) Case reports confirm poisonings in people using neonic products. The U.S. Environmental Protection Agency (EPA) collects reports of pesticide poisonings. Over the last ten years, EPA has received over 1600 reports of people and pets being poisoned with imidacloprid, one type of neonic.³ Reported symptoms include muscle tremors, difficulty breathing, memory loss, and more.⁴ These symptoms are tell-tale signs of poisoning with a neurotoxic chemical.

(2) *Epidemiologic studies link neonic exposure to elevated risks of congenital malformations neurodevelopmental abnormalities.* Epidemiologic studies in exposed populations link neonic exposure with birth defects affecting the heart⁵ and brain,⁶ autism-like symptoms,⁷ and other neurological conditions.⁸

(3) *Animal toxicology studies report harmful reproductive and neurodevelopmental effects.* For example, studies have found that exposure to neonics was linked with low sperm count, reduced testosterone, increased incidence of abnormal sperm, and other reproductive problems in tested animals.⁹ Neurological effects such as reduced thyroid function,¹⁰ structural changes in the brain, and impaired reflexes have also been reported in studies of lab animals and exposed wildlife.¹¹ A study of exposed white-tailed deer also observed congenital malformations and higher rates of death for prenatally exposed fawns.¹²

Exposure to neonics is widespread. A survey by the Centers for Disease Control and Prevention (CDC) found that over half the U.S. population had traces of neonics in their urine, indicating recent exposure.¹³ This exposure could be from contact with treated areas like lawns, contaminated water,¹⁴ or from contaminated foods including non-organic cherries, apples, pears, spinach, and even baby food.¹⁵

Chemicals that impact the developing nervous system, like lead and mercury, have no safe level of exposure during pregnancy and early life development. The brain and nervous system have very little capacity for repair, so exposures that occur during development can lead to neurological decrements that last a lifetime. For this reason, using pesticides designed to affect the nervous system is a terrible idea. In a recently published op-ed, [Dr. Philip Landrigan, MD, warned](#) against the continued use of neonics, writing, "We understand that lead and all other neurotoxic chemicals cause brain damage at even the very lowest levels of exposure — reducing children's intelligence, lowering IQ, shortening attention span, and disrupting behavior. The problem is that while we waited for this evidence and deferred preventive action, lead remained on the market. Millions of children were needlessly exposed to lead in that time and suffered permanent damage. We cannot allow that sorry history to repeat itself."¹⁶

[A7429/S699B](#) would:

- Ban neonic-treated corn, soybean, and wheat seeds, which account for roughly three quarters of the neonics used in New York agriculture,¹⁷ but which a recent in-depth [Cornell University review](#) of over 1,100 peer-reviewed papers finds provide "no overall net income benefit" to growers;¹⁸
- Ban most non-agricultural, turf and ornamental neonic uses;
- Direct the Department of Environmental Conservation (DEC) to designate outdoor neonic products as "restricted use," meaning they can only be purchased and used by trained and certified pesticide applicators; and
- Preserve DEC authority to allow neonic use to treat harmful invasive species, like emerald ash-borer or hemlock wooly adelgid.

Given the evidence suggesting possible neurological harms associated with neonics, the unnecessary neonic uses targeted by A7429/S699B are simply unjustifiable. We encourage swift passage of this bill, which would reduce harmful human exposures to these toxic compounds in New York.

Respectfully,*

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