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Pollinator Protection Act (SB 163 / HB 605): Frequently Asked Questions

Scientific Research

Q: What scientific evidence exists that neonicotinoids (neonics) harm bees and other pollinators?

In 2014, an international meta-analysis of approximately 1,121 peer-reviewed studies on the impact of systemic pesticides, conducted by the International Union for the Conservation of Nature (IUCN), [confirmed](#) that neonics “are causing significant damage to a wide range of beneficial invertebrate species and are a key factor in the decline of bees.” The report also called for immediate regulatory action on neonicotinoids.

The U.S. Environmental Protection Agency (EPA), which is currently reviewing its registration of neonicotinoids, [says](#): “Some uncertainties have been identified since their initial registration regarding the potential environmental fate and effects of neonicotinoid pesticides, particularly as they relate to pollinators. Data suggest that neonicotinic residues can accumulate in pollen and nectar of treated plants and may represent a potential exposure to pollinators. Adverse effects data as well as beekill incidents have been reported, highlighting the potential direct and/or indirect effects of neonicotinic pesticides.”

Click [here](#) for a more comprehensive list of scientific research showing that neonics harm bees.

Q: Don't other factors contribute to honey bee death or colony collapse disorder? What about the effects of the *varroa* mite?

Many factors contribute to bee decline. However, research shows that neonics are a significant contributor that weakens the bee's immune system and makes them more susceptible to diseases, including to the *varroa* mite. Pinpointing causes of declining bee health involves complexities, but existing research shows that the causes of the devastating losses are interrelated. Bees are weakened because of the chemicals' impacts on their brain cells and neuronal (nervous system) function. With the depression of basic functions, the bees' vulnerability to parasites and viruses is elevated.

In addition to killing bees outright, research shows that even low levels of these toxic pesticides impair bees' ability to learn, find their way back to the hive, collect food, produce new queens, and mount an

“I have been conducting research on bee health for 20 years, and it is clear to me that neonicotinoid pesticides are contributing to bee declines. This is a view shared by the large majority of the scientific community, and by the majority of European Union countries (we introduced an EU-wide ban of many uses of neonicotinoids in 2013). **These are highly potent neurotoxins that should not be sold to the public for domestic use.**”

– Professor Dave Goulson, Ph.D., FRSE, FRES, University of Sussex, United

effective immune response. A University of California San Diego study shows that exposure to neonics changes bees' eating behavior and reduces their sustenance or nutrition.

Q: Are bee hive losses continuing?

Beekeepers in Maryland and nationally are reporting significant losses. During the winter of 2012-13, nearly 60 percent of Maryland's managed honeybee hives collapsed – double the national average. The next winter, losses continued at nearly 50 percent, according to reports from the state's chief apiary inspector. Beekeepers have reported average hive losses of 30 percent or higher each year since 2006. These losses are not sustainable.

Q: Can pesticides be harmful -- even if the user follows the label properly?

According to the IUCN study, "Levels of pollution with neonicotinoids and fipronil caused by authorized uses (i.e., following label rates and applying compounds as intended) frequently exceed the lowest observed adverse effect concentrations for a wide range of non-target species and are thus likely to have a wide range of negative biological and ecological impacts." These scientists question the adequacy of existing regulations and compare the previous widespread use of DDT before it was withdrawn due to great risks to human and wildlife health, saying "neonicotinoids... represent a new chapter in the apparent shortcomings of the regulatory pesticide review and approval process."

Because of the toxic, persistent and systemic nature of widely used neonic pesticides, EPA's regulations do not adequately address the underlying process of incorporating this type of poison into the plant's entire system. The label for neonics misleadingly implies that the chemical is only harmful to bees when sprayed. The reality is that neonics affect the entire plant for months or even years after treatment, thus continuing to affect bees.

Q: Do neonics harm other wildlife or aquatic species? What about human health?

In addition to harming bees, the IUCN study concludes that neonics harm birds, bats, butterflies, dragonflies, lacewings, ladybugs, earthworms, small mammals, amphibians, and aquatic insects. Neonics also have been linked to [death of molting blue crabs](#), which often live in shallow creeks that can experience elevated pesticide loads. Neonics are also linked to [declines in macro-invertebrates](#) (including slugs, snails, mayflies and crustaceans).

Just one seed coated in neonics is enough to kill a song bird, according to a [report](#) by the American Bird Conservancy. University of Minnesota [research](#) shows that butterfly larvae feeding on neonic-contaminated milkweed plants died soon thereafter, and neonic-treated plants in backyards near milkweed plants create serious potential risks to monarchs and other butterfly species.

Neonics also pose a risk to human health. The [European Food Safety Authority](#) has concluded that some neonicotinoids may affect the developing human nervous system by affecting functions such as learning and memory. It proposes that "some guidance levels for acceptable exposure to those neonicotinoids be lowered while further research is carried out to provide more reliable data on so-called developmental neurotoxicity."

Consumer Use Restriction

Q: Does this bill affect farmers or the agricultural industry?

Farmers, certified applicators (including pest control and lawn care companies) and veterinarians would be exempt from this bill. They would continue to be able to purchase and use neonics without restrictions.

Q: Why seek restrictions on consumer use?

Neonics are toxic chemicals that scientists believe harm bees and other wildlife and pose a risk to aquatic life and human health. Unlike certified pesticide applicators, such as farmers, pest control and lawn care companies, consumers are not trained in their proper use. Consumer use of this toxic chemical is not needed – particularly when less toxic, neonic-free products are available for home and garden use.

Q: If we don't restrict neonics used by farmers, certified applicators or veterinarians will this bill make a big difference?

It will make a big difference to protect bees, wildlife and public health if these harmful pesticides, used for non-essential purposes, are restricted and we reduce their use. While the widespread agricultural use of neonicotinoids is a common exposure pathway for bees, cosmetic use of these pesticides in gardens, lawns, and landscapes may also be an important contributing factor in declining bee and wild pollinator health.

Many of the “bee-friendly” seedlings and plants sold to unsuspecting consumers in nurseries and garden stores across the United States have been pre-treated with neonicotinoids at much higher doses than are used on farms, where levels of neonicotinoid use are already raising concerns among beekeepers and researchers studying the decline of pollinator populations. These nursery plants carry neither a list of pesticides used, nor do they carry a warning that these plants could harm pollinators. This bill would be instrumental in protecting bees and other pollinators from unnecessary uses of neonicotinoid pesticides.

Q: Is anyone else restricting the use of neonics? Would Maryland be alone in this effort?

Many other government agencies and localities are restricting the use of neonics. Europe has imposed a two-year restriction on the use of the most widely used neonics. Minnesota and Oregon as well as Spokane, Washington; Seattle, Washington; Thurston County, Washington; Eugene, Oregon; Shorewood, Minnesota; Ogunquit, Maine and the province of Ontario, Canada, have passed measures to address the use of neonicotinoids. Vermont Law School and Emory University have banned neonics from their campuses.

The U.S. Fish and Wildlife service is phasing out neonic use and it will be prohibited on national wildlife lands by 2016. At the federal level, EPA is currently assessing the effect of pesticides, including neonicotinoids, on bees and other pollinators, and this should be finished between 2016 and 2019.

Q: Are other, less-toxic – and less costly – alternatives available?

Yes, there are more than 290 neonic-free products for common pests -- click [here](#) for a detailed list.

Q: Will I still be able to purchase pet flea and tick products that contain neonics at a store? Or will they be prescription only?

An amendment to the bill would exempt flea and tick products. Veterinarians are already exempt.

Q: How will this law be enforced?

In general, industries are trusted to abide by the law. Only a modest inspection program with periodical checks would be necessary. MDA would incorporate the law's requirements under its ongoing efforts to monitor compliance to existing federal and state pesticide laws.

Labels on Nursery Plants

Q: Why should nursery plants be labeled? Is this really that big of a problem?

Marylanders want to make informed choices in the marketplace and therefore have a right to know when they are purchasing products that contain neonic pesticides. Consumers may be unaware that many "bee friendly" garden plants sold at home garden centers have been pre-treated with these bee-killing pesticides. More than half of "bee-friendly" plants purchased at Home Depot, Walmart and Lowes stores in 18 cities across the US and Canada, including in Maryland, had levels of neonicotinoids, at sufficient levels to kill bees outright, according to a 2014 Friends of the Earth study.

Q: How will businesses respond to being required to use labels?

Home Depot now requires its suppliers to label all plants treated with neonicotinoid pesticides, and BJ's Wholesale Club required vendors to remove neonicotinoids from plants by the end of 2014 and/or require warning labels for neonicotinoid-treated plants. Two Maryland nurseries, Behnke's Nurseries in Beltsville and Cavano's Perennials in Kingsville, have stopped using neonics on their plants. Behnke's has also discontinued sales of all neonicotinoid-containing products. Behnke's is drafting a brochure for customers explaining the concerns regarding neonicotinoids and identifying the growers that provide the nursery with neonic-free plants. They join more than twenty nurseries, landscaping companies and garden centers that have taken steps to eliminate neonic use across the country.

Q: Will agricultural crops – or farmers – be affected by the labeling requirement?

No, the bill would only require labels on plants sold in nurseries for home and garden use; it would not restrict the use of neonics on agricultural seeds and crops.

Q: How will we make sure nursery products coming from outside of Maryland are labeled?

The bill does not specifically require the growers to label the plants. Retailers can label the plants based on a letter of confirmation from the grower as to which plants are neonic-free; whether a plant comes from Maryland or out-of-state should not matter.

Public Support

Q: Do Marylanders support this bill?

Yes – there is enormous voter support for this bill. Based on a recent OpinionWorks telephone [survey](#) of 562 randomly selected Maryland registered voters, 81 percent of voters support the proposal to label plants, and 78 percent of Maryland voters favor restricting consumer use of this type of pesticides.

The [Smart on Pesticides Maryland](#) coalition works to protect Marylanders and the natural systems we depend upon from the toxic impacts of pesticides. The coalition includes more than 55 organizations, and institutions representing communities, businesses, health care providers, farmers, environmentalists, Waterkeepers, interfaith congregants as well as environmental justice, public health and wildlife advocates.