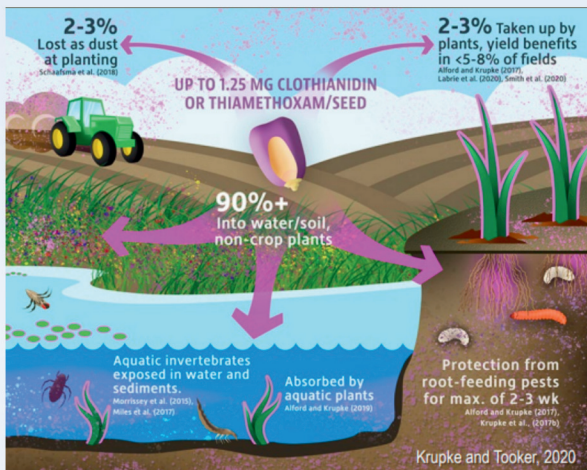




NEONICS & THE RISK TO VERMONT'S HONEY BEES

THE PROBLEM

Neonicotinoids are a class of systemic insecticide that are absorbed by plants when applied, and then expressed in all plant tissues including the foliage, nectar, and pollen. **They can pose a major risk of exposure to honey bees and other pollinators** that feed on and collect contaminated floral resources.



Neonicotinoids are water soluble, and have the potential to leach from soils and contaminate groundwater or nearby surface water.

Oftentimes, these chemicals can persist in the soil for months to years after a single application.

Neonicotinoid-treated seed coatings from corn, soybean, and wheat represent the largest use of neonicotinoids in Vermont.

HOW ARE BEES EXPOSED?

Foraging honeybees encounter neonicotinoids through multiple routes:

- Exposure through dust created by planting treated seeds
- Foraging water droplets from neonic treated crop plants
- Collecting nectar or pollen from neonic treated crop plants
- Nectar or pollen from wildflowers that absorbed neonics from the soil



HARM & IMPACT ON BEES

Neonicotinoids are neurotoxic chemicals that **paralyze insects** by blocking the pathways that allow nerve impulses to reach the central nervous system, causing symptoms that include:

- Death
- Twitching
- Paralysis
- Shortened life expectancy
- Reduced fertility in queen bees
- Impaired juvenile development, nesting, and foraging ability



Neonic exposure synergizes with honeybee pathogens and various bee viruses to cause increased symptoms and mortality, further **impacting the overall health and survival** of the colony.

TO HELP, YOU CAN:

- Do your research on possible **alternatives for pest management** (*resources available at [POPVT.org/resources](https://popvt.org/resources)*)
- **Check your seed labels** or inquire with your seed company representatives about transitioning to non-treated seeds
- **Avoid spraying pesticides** during bloom times, when the risk of direct contact with honey bees is highest

BUT...

The best way to protect the Vermont honey bee population from exposure is to avoid the use of neonic pesticides altogether.

*Support the proposed legislation to restrict neonics
& sign the petition at [POPVT.org](https://popvt.org) today!*

More resources and cited sources available at [POPVT.org/resources](https://popvt.org/resources)

