



## **Backgrounder: Special Review Decisions for Clothianidin and Thiamethoxam (Aquatic Insects)**

March 2021

Today, Health Canada is publishing two special review decisions regarding the risks to aquatic insects from two neonicotinoid pesticides: clothianidin and thiamethoxam.

Neonicotinoids are a group of pesticides used in agriculture to protect crops from various insects. They are also used for other purposes, including killing insects in homes, and controlling fleas on pets. Neonicotinoid pesticides have been used in agriculture on a wide variety of crops since the 1990s.

In Canada, there are three main neonicotinoids currently approved for agricultural use: imidacloprid, clothianidin, and thiamethoxam.

On [August 15, 2018](#), Health Canada consulted publicly on the proposed special review decisions to cancel all outdoor uses of clothianidin and thiamethoxam. At the time, concerns were identified by Health Canada from available scientific information that these two pesticides are frequently being detected in aquatic environments in Canada at concentrations that may pose a risk to aquatic insects. These insects are an important part of the ecosystem, including as a food source for fish, birds and other animals. As a result, more than 47,000 comments were received, as well as a substantial amount of new information, including new studies and water monitoring data from various sources such as registrants, provinces, academia and other regulatory authorities. In addition, several new scientific papers were released. The final special review decisions related to aquatic insects for clothianidin and thiamethoxam, originally targeted for fall 2020, were delayed until now due to the unprecedented volume of information received during consultation and the challenges of the COVID-19 pandemic.

To protect aquatic insects, Health Canada's final decision is to cancel some uses of clothianidin and thiamethoxam, and introduce additional mitigation measures and restrictions on some of the uses that remain registered.

In 2019, Health Canada issued final re-evaluation decisions that put in place restrictions on the use of neonicotinoids to protect bees and other pollinators ([RVD2019-04](#), [RVD2019-05](#)).

Health Canada's scientists have reviewed a large body of scientific information and concluded that a complete ban on neonicotinoid pesticides is not warranted. The additional risk mitigation actions announced in today's final decisions, such as reducing the rate of applications and spray buffer zones, will address the risks posed to aquatic insects.

Health Canada will release its final re-evaluation decision for imidacloprid later this year. The Department is in the final stages of completing the review.