To prohibit the use of chlorpyrifos on food, and for other purposes.

IN THE SENATE OF THE UNITED STATES
JULY 25, 2017

Mr. UDALL (for himself, Mr. BLUMENTHAL, Mr. BOOKER, Mr. DURBIN, Mrs. GILLIBRAND, Mr. MARKEY, Ms. HARRIS, Mr. CARDIN, and Mr. MERKLEY) introduced the following bill; which was read twice and referred to the Committee on Agriculture, Nutrition, and Forestry

A BILL
To prohibit the use of chlorpyrifos on food, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.
This Act may be cited as the “Protect Children, Farmers, and Farmworkers from Nerve Agent Pesticides Act of 2017”.

SEC. 2. FINDINGS.
Congress finds as follows:

(1) In 1996, Congress unanimously passed the Food Quality Protection Act of 1996 (Public Law

(2) The FQPA directs the EPA to ensure with “reasonable certainty” that “no harm” will result from food, drinking water, and other exposures to a pesticide. If EPA cannot make this safety finding, it must prohibit residues and use of the pesticide on food. The FQPA mandates that EPA must consider children’s special sensitivity and exposure to pesticide chemicals and must make an explicit determination that the pesticide can be used with a “reasonable certainty of no harm” to children. In determining acceptable levels of pesticide residue, EPA must account for the potential health harm from pre-and postnatal exposures. The economic benefits
of pesticides cannot be used to override this health-based standard for children from food and other exposures.

(3) Chlorpyrifos is a widely used pesticide first registered by EPA in 1965. Chlorpyrifos is an organophosphate pesticide, a class of pesticides developed as nerve agents in World War II and adapted for use as insecticides after the war. Chlorpyrifos and other organophosphate pesticides affect the nervous system through inhibition of cholinesterase, an enzyme required for proper nerve functioning. Acute poisonings occur when nerve impulses pulsate through the body, causing symptoms like nausea, vomiting, convulsions, respiratory paralysis, and, in extreme cases, death. Based on dozens of peer-reviewed scientific articles, EPA determined that exposure during pregnancy to even low levels of chlorpyrifos that caused only minimal cholinesterase inhibition (10 percent or less) in the mothers could lead to measurable long-lasting and possibly permanent neurobehavioral and functional deficits in prenatally exposed children.

(4) People, including pregnant women, are exposed to chlorpyrifos through residues on food, contaminated drinking water, and toxic spray drift from
nearby pesticide applications. Chlorpyrifos is used on an extensive variety of crops, including fruit and nut trees, vegetables, wheat, alfalfa, and corn. Between 2006 and 2012, chlorpyrifos was applied to more than 50 percent of the Nation’s apple and broccoli crops, 45 percent of onion crops, 46 percent of walnut crops, and 41 percent of cauliflower crops.

(5) Chlorpyrifos is acutely toxic and associated with neurodevelopmental harms in children. Prenatal exposure to chlorpyrifos is associated with elevated risks of reduced IQ, loss of working memory, delays in motor development, attention-deficit disorders, and structural changes in the brain.

(6) There is no nationwide chlorpyrifos use reporting. The United States Geological Survey estimates annual pesticide use on agricultural land in the United States, and estimates that chlorpyrifos use on crops in 2014 ranged from 5,000,000 to 7,000,000 pounds of chlorpyrifos.

(7) In its 2016 report, the Federal Insecticide, Fungicide, and Rodenticide Act Scientific Advisory Panel recognized “the growing body of literature with laboratory animals (rats and mice) indicating that gestational and/or early postnatal exposure to chlorpyrifos may cause persistent effects into adult-
hood along with epidemiology studies which have evaluated prenatal chlorpyrifos exposure in mother-infant pairs and reported associations with neurodevelopment outcomes in infants and children.”.

(8) Chlorpyrifos has long been of concern to EPA. Residential uses of chlorpyrifos ended in 2000 after EPA found unsafe exposures to children. EPA also discontinued use of chlorpyrifos on tomatoes and restricted its use on apples and grapes in 2000, and obtained no-spray buffers around schools, homes, playfields, day cares, hospitals, and other public places, ranging from 10 to 100 feet. In 2015, EPA proposed to ban all chlorpyrifos food tolerances, based on unsafe drinking water contamination, which would end use of chlorpyrifos on food in the United States. After updating the risk assessment for chlorpyrifos in November 2016 to protect against prenatal exposures associated with brain impacts, EPA found that expected residues from use on food crops exceeded the safety standard, and additionally the majority of estimated drinking water exposures from currently allowed uses of chlorpyrifos also exceeded acceptable levels, reinforcing the need to revoke all food tolerances for the pesticide.
Chlorpyrifos threatens the healthy development of children. Children experience greater exposure to chlorpyrifos and other pesticides because, relative to adults, they eat and drink more proportional to their body weight. A growing body of evidence shows that prenatal exposure to very low levels of chlorpyrifos can lead to lasting and possibly permanent neurological impairments. In November 2016, EPA released a revised human health risk assessment for chlorpyrifos that confirmed that there are no acceptable uses for the pesticide, all food uses exceed acceptable levels, with children ages 1 to 2 exposed to levels of chlorpyrifos that are 140 times what the EPA considers acceptable.

Chlorpyrifos threatens agricultural workers. Farm workers are exposed to chlorpyrifos from mixing, handling, and applying the pesticide, as well as from entering fields where chlorpyrifos was recently sprayed. Chlorpyrifos is one of the pesticides most often linked to acute pesticide poisonings, and in many States, it is regularly identified among the 5 pesticides linked to the highest number of pesticide poisoning incidents. This is significant given widespread under-reporting of pesticide poisonings due to such factors as inadequate reporting systems,
fear of retaliation from employers, and reluctance to seek medical treatment. According to the EPA, all workers who mix and apply chlorpyrifos are exposed to unsafe levels of the pesticide even with maximum personal protective equipment and engineering controls. Field workers are currently allowed to re-enter fields within 1 to 5 days after chlorpyrifos is sprayed based on current restricted entry intervals on the registered chlorpyrifos labels but unsafe exposures continue on average 18 days after applications.

(11) Chlorpyrifos threatens families in agricultural communities. Rural families are exposed to unsafe levels of chlorpyrifos on their food and in their drinking water. They are also exposed to toxic levels of chlorpyrifos when it drifts from the fields to homes, schools, and other places people gather. EPA’s 2016 revised human health risk assessment found that chlorpyrifos drift reaches unsafe levels at 300 feet away from the edge of the treated field, and the chemical chlorpyrifos is found at unsafe levels in the air at schools, homes, and communities in agricultural areas. The small buffers put in place in 2012 leave children unprotected from this toxic pesticide drift.
(12) Chlorpyrifos threatens drinking water. EPA’s 2014 and 2016 risk assessments have found that chlorpyrifos levels in drinking water are unsafe. People living and working in agricultural communities are likely to be exposed to higher levels of chlorpyrifos and other organophosphate pesticides in their drinking water.

(13) In 2015, leading scientific and medical experts, along with children’s health advocates, came together, under “Project TENDR: Targeting Environmental Neuro-Developmental Risks” (referred to in this section as “TENDR”), to issue a call to action to reduce widespread exposures to chemicals that interfere with fetal and children’s brain development. Based on the available and peer-reviewed scientific evidence, the TENDR authors identified prime examples of neurodevelopmentally toxic chemicals “that can contribute to learning, behavioral, or intellectual impairment, as well as specific neurodevelopmental disorders such as ADHD or autism spectrum disorder,” and listed organophosphate pesticides, among them. In the United States, based on reporting from parents, 1 in 6 children have a developmental disability or other developmental delay. The TENDR Consensus Statement concludes that
“to help reduce the unacceptably high prevalence of neurodevelopmental disorders in our children, we must eliminate or significantly reduce exposures to chemicals that contribute to these conditions.”.

SEC. 3. PROHIBITIONS RELATING TO CHLORPYRIFOS.

Section 402 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 342) is amended by adding at the end the following:

“(j) Notwithstanding any other provision of law, if it bears or contains chlorpyrifos, including any residue of chlorpyrifos, or any other added substance that is present on or in the food primarily as a result of the metabolism or other degradation of chlorpyrifos.”.

SEC. 4. REVIEW OF ORGANOPHOSPHATE PESTICIDES.

(a) IN GENERAL.—Not later than 90 days after the date of enactment of this Act, the Administrator of the Environmental Protection Agency (referred to in this section as the “Administrator”) shall offer to enter into a contract with the National Research Council to conduct a cumulative and aggregate risk assessment that addresses all populations, and the most vulnerable subpopulations, including infants, children, and fetuses, of exposure to organophosphate pesticides.

(b) CONTENTS OF REVIEW.—The review under subsection (a) shall—
(1) assess the neurodevelopmental effects and other low-dose effects of exposure to organophosphate pesticides, including in the most vulnerable subpopulations, including—

(A) during the prenatal, childhood, adolescent, and early life stages; and

(B) agricultural workers;

(2) assess the cumulative and aggregate risks from exposure described in paragraph (1), which shall aggregate all routes of exposure, including diet, pesticide drift, volatilization, occupational, and take-home exposures; and

(3) be completed and submitted to the Administrator not later than October 1, 2019.

(c) REGULATORY ACTION.—

(1) APPLICABILITY.—This subsection shall apply if the Administrator becomes aware of any exposure to any organophosphate pesticide, including exposures described in paragraphs (1) and (2) of subsection (b), that does not meet, as applicable—

(A) the standard under section 408(b)(2) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a(b)(2)); or
(B) any standard under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.).

(2) Action.—Not later than 90 days after the date on which the Administrator becomes aware of any exposure under paragraph (1), the Administrator shall take any appropriate regulatory action, regardless of whether the review under subsection (a) is completed, including—

(A) revocation or modification of a tolerance under section 408 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a); or

(B) modification, cancellation, or suspension of a registration under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.).

(d) Effect.—Nothing in this section authorizes or requires the Administrator to delay in carrying out or completing, with respect to an organophosphate pesticide, any registration review under section 3(g) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136a(g)), any tolerance review under section 408 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 346a), or any registration or modification, cancellation, or suspension of a registration under section 3 or 6 of the Fed-
eral Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136a, 136d), if—

(1) the organophosphate pesticide does not meet applicable requirements established under those provisions of law; or

(2) the review, registration, modification, cancellation, or suspension is required—

(A) by statute;

(B) by judicial order; or

(C) to respond to a petition.