



Testimony in Support of House Bill HB472

February 3 , 2021

Dear Chairman Barve and Members the Environment and Transportation Committee:

The Maryland Pesticide Education Network and its Smart on Pesticides Coalition comprised of 108 organizations and businesses, support passage of HB472.

Glyphosate, most commonly known and applied as “RoundUp,” is the most widely used pesticide in the world. It is applied to lawns and gardens, parks and playgrounds, farm fields and food crops, and then runs with rainfall into the waterways and thus drinking water.¹

Restricting the use of this weed killer on state, county and city government owned or leased grounds and parks will significantly help to protect Maryland citizens from the serious adverse impacts of this well researched pesticide.

Human Health Impacts: In 2015, the UN World Health Organization’s International Agency on Research on Cancer (IARC) determined that glyphosate is a “probable carcinogen to humans” – after reviewing numerous peer-reviewed scientific studies that link it to a wide range of cancers.² These include pancreatic cancer, skin cancers, non-Hodgkin’s lymphoma and endocrine disruption, as well as non-cancer illness such as liver and kidney damage, genetic damage, decreased sperm count and developmental abnormalities.

In April 2019, the Agency for Toxic Substances and Disease Registry (a US federal public health agency) released its draft Toxicological Profile for Glyphosate, which supports the earlier cancer assessment of the IARC.³ By 2017, glyphosate was listed as a cancer-causing chemical under California’s Safe Drinking Water and Toxic Enforcement Act. requiring cancer warning labels be placed on glyphosate products in California.⁴

Glyphosate residues are found in various food products including oat-based cereals our children eat⁵, wine (even organic wines⁶ and honey⁷). A 2019 released Washington State University found exposure to Roundup can cause problems generations later⁸.

Environmental Impacts

Bees. Honeybees exposed to glyphosate lose some of their beneficial intestinal bacteria and become more susceptible to infection and death from harmful bacteria.⁹ They found that young worker bees exposed to glyphosate died more often when later exposed to a common bacterium. Another major impact is the destruction of wildflowers on which they depend.¹⁰

¹ Natural Resources Defense Council: <https://on.nrdc.org/2XRIGkg>

² “Glyphosate,” IARC Monographs–112.

³ Toxicological Profile for Glyphosate, ATSDR, 2019. pps. 2-5: <http://bit.ly/2vqBMVE>

⁴ OEHHA. Notice of Intent to List: Tetrachlorvinphos, Parathion, Malathion, Glyphosate. September 2015. <http://bit.ly/2WaYSeL>

⁵ <https://www.ewg.org/release/new-round-ewg-tests-finds-more-children-s-cereals-tainted-monsanto-s-cancer-causing>

⁶ [https://d3n8a8pro7vhnmx.cloudfront.net/yesmaam/pages/680/attachments/original/1458848651/3-24-16_GlyphosateContaminationinWineReport_\(1\).pdf?1458848651](https://d3n8a8pro7vhnmx.cloudfront.net/yesmaam/pages/680/attachments/original/1458848651/3-24-16_GlyphosateContaminationinWineReport_(1).pdf?1458848651)

⁷ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0009754>

⁸ https://www.inlander.com/spokane/a-wsu-study-finds-exposure-to-prevalent-herbicide-roundup-can-cause-problems-generations-down-the-line/Content?oid=17699513&fbclid=IwAR0c21ZS82a-I_MhZhb9VCcxb_Pk8f8WwK7DGzX_w9M1xdeoKp2Dx53WPQU

⁹ Motta et al. Glyphosate perturbs the gut microbiota of honeybees. 2018. PNAS. <http://bit.ly/2ZKF7wG>

¹⁰ Monsanto’s global weed killer harms honeybees, research finds. The Guardian 09.24.2018. <http://bit.ly/2ULRqFg>

Other Wildlife. Glyphosate used directly impacts a variety of nontarget animals, including insects, earthworms, and fish, and indirectly impacts birds and small mammals. Roundup kills beneficial insects, including parasitoid wasps, lacewings and ladybugs. Repeated applications of glyphosate significantly affect the growth and survival of earthworms. Environmental factors, such as high sedimentation, increases in temperature and pH levels increase the toxicity of Roundup, especially to young fish.¹¹

Marine Life: Researchers have linked changes in metabolism, growth, behavior and reproduction of certain fishes, mollusks and insects with exposure to glyphosate-containing herbicides¹²

Superweeds. It causes weed resistance due to use in genetically engineered crop production, water contamination, soil quality degradation and is toxic to soil microorganisms and aquatic organisms,” according to a 2017 Cornell study.¹³ Simultaneously, researchers are finding that RoundUp is increasingly generating weed resistance in a way that use of glyphosate products is becoming much less effective for farmers.¹⁴

Soil degradation. “As farmers battle in their above-ground war on weeds, they may inadvertently create underground casualties – unintentionally attacking the beneficial bacteria that help crops guard against enemy fungus.¹⁵

Background: Originally registered in 1974, glyphosate is used to kill broadleaf weeds and grasses. It is applied to more than 100 food crops, as well as forests, greenhouses, rights-of-way, turf and garden beds.

Alternatives to Glyphosate

There are safer options for managing the kinds of broadleaf weeds that are targeted by glyphosate:¹⁶

- The best alternative is to prevent the weeds from emerging by overseeding, using mulches and sanitation practices that prevent the introduction and spread of weed seeds.
- Vinegar and botanical oils, including clove oil, when applied at the recommended dose and with thorough spray coverage, can manage seedling broadleaf weeds.
- Flame weeding, steam or hot foam can be useful on seedling broadleaf weeds. And it is not necessary to burn the plants – merely to heat water inside the weeds, which causes them to collapse.
- Hand weeding is labor-intensive but is most effective when done before weeds have been able to establish a large root system and go to seed.
- A UMD study found acetic acid-based alternative herbicides can help manage more than a dozen common weeds.¹⁷

We ask for your favorable vote on HB472. Thank you.

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¹¹ Beyond Pesticides: <http://bit.ly/2Vp8aXF>

¹² <http://bit.ly/2SrRFGb>

¹³ Beyond Pesticides: <http://bit.ly/2Vp8aXF>

¹⁴ Science Daily: <http://bit.ly/30NeJCI>

¹⁵ Cornell Chronicle: <http://bit.ly/2L9xsFd>

¹⁶ NC State Extension: <http://bit.ly/2y9iucZ>

¹⁷ University of Maryland Extension: <http://bit.ly/2y7KdXB>

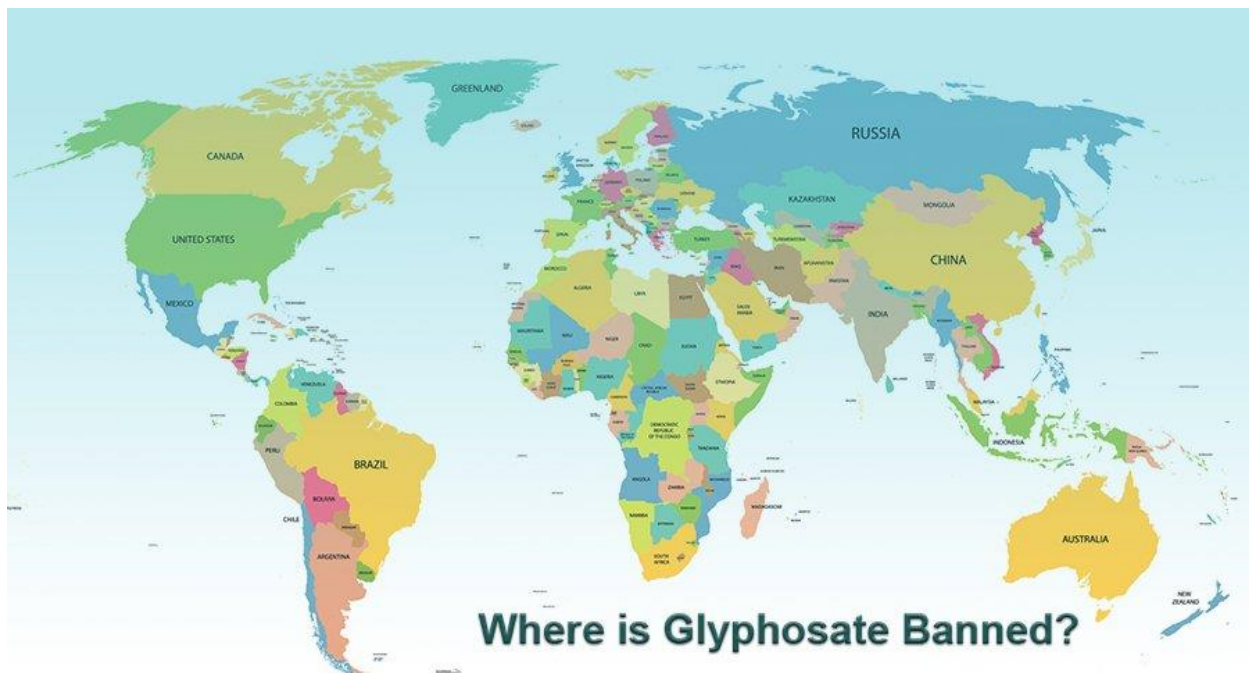
Where is Glyphosate Banned?

Updated 1/22/21 – Data Courtesy of Baum Hedlund Aristei Goldman PC (<http://bit.ly/2TlxIQy>)

Municipalities in MD, elsewhere in the USA and in many nations throughout the world have taken steps either to restrict or ban glyphosate, the active ingredient in Monsanto's Roundup herbicide – the most widely used pesticide in the world. The municipalities and countries listed below have issued outright bans on glyphosate, imposed restrictions or have issued statements of intention to ban or restrict glyphosate-based herbicides, including Roundup, over health concerns.

Most of the glyphosate restrictions or bans throughout the world were introduced following a landmark report on glyphosate by the World Health Organization's International Agency for Research on Cancer. The IARC concluded that glyphosate is a "probable human carcinogen."

According to the report, the cancers most associated with glyphosate exposure were found to be non-Hodgkin lymphoma and other cancers. Other glyphosate studies have linked it to health issues, including, but not limited to ADHD, Alzheimer's Disease, Autism, Birth Defects, various forms of cancer, Celiac Disease, Colitis, Heart Disease, Inflammatory Bowel Syndrome, Kidney Disease, [Liver Disease](#), and Parkinson's Disease.



U.S. Municipalities Taking Action on Glyphosate

Maryland

- **Greenbelt, MD** – Adopted [Sustainable Land Care](#) policy for public lands calling for limited use of pesticides.
- **Howard County, MD** – Implemented a least-toxic IPM policy and accompanying legislation for county grounds maintenance.
- **Hyattsville, MD** – [Passed ordinance prohibiting the use of toxic pesticides](#) on public property in favor of alternative, organic methods
- **Montgomery County, MD** – [County Council voted to ban the use of cosmetic pesticides](#) on private lawns and the Parks Department has banned use of glyphosate in county parks.
- **Takoma Park, MD** – [Placed restriction on cosmetic pesticides](#) for lawn care on public and private property

Arizona

- Tucson, AZ – [Created an organics-first policy for controlling weeds on city property.](#)

California

- Alameda County, CA -- East Bay Regional Park District banned glyphosate around picnic & play areas and plans to ban Roundup in parks.
- Arcata, CA – [Initiated a pesticide reduction plan](#) that urges pesticides to only be used as a last resort.
- Belvedere, CA – [Passed municipal ordinance](#) initiating Integrated Pest Management program that restricts toxic pesticide use and urges pesticide use as last resort.
- Benicia, CA – [City decided to go glyphosate-free](#) following the verdict in Johnson v. Monsanto Co.
- Berkeley, CA – [Implemented pest management program](#) to minimize or eliminate the use of pesticides.
- Burbank, CA – [City Council members voted to discontinue the use of Roundup](#) in city parks for one year, and [Burbank Unified School District will no longer use the herbicide](#) due to cancer concerns.
- Cambria, CA -- North Coast school board has proposed a ban on glyphosate for all school properties.
- Carlsbad, CA – The City Council voted unanimously to adopt a policy that makes organic pesticides the preferred method for killing weeds. “Asked to choose between aesthetics and public health...I’m going to choose public health every time,” [said Councilwoman Cori Schumacher.](#)
- Clayton, CA – Banned use of Roundup on city property.
- Concord, CA – Mount Diablo Unified School District banned glyphosate on school property.
- Contra Costa County, CA – [Restricted/Discontinued](#) the use of glyphosate. *
- Corte Madera, CA – [Passed ordinance](#) calling for Integrated Pest Management (IPM) program restricting highly toxic pesticides, while also urging for pesticide use to be a last resort.
- Costa Mesa, CA – City Council adopted an organics-first Integrated Pest Management policy.
- Davis, CA – [Passed ordinance](#) implementing Integrated Pest Management (IPM) program designed to reduce the use of pesticides. Some city parks do not allow the use of glyphosate.
- Encinitas, CA – [Banned the use of Roundup and other glyphosate-based weed killers in city parks.](#)
- Fairfax, CA – [Passed municipal ordinance](#) restricting use of toxic pesticides on public property in favor of alternative methods.
- Greenfield CA – [Restricted/Discontinued](#) the use of glyphosate. *
- Irvine, CA – City Council passed resolution to [cease spraying Roundup and other chemicals on public parks, streets and playgrounds.](#)
- Lodi, CA – The city decided to ban use of Roundup within 25 feet of playgrounds.
- Long Beach, CA – [announced an immediate halt on the spraying of Roundup](#) in Long Beach Parks.
- Los Angeles County, CA – The Los Angeles County Board of Supervisors issued a moratorium on glyphosate-based herbicides, including Roundup.
- Marin County, CA – Stopped using glyphosate on all county-maintained parks, landscaping, playgrounds, walkways and parking areas..
- Mill Valley, CA – [Passed ordinance initiating Integrated Pest Management program](#) that restricts toxic pesticide use and urges pesticide use as last resort.
- Napa, CA – Policy announced in March 2019 banned glyphosate use on city property, completing a phase-out campaign that was three years in the making.
- Novato, CA – Following the \$289 million Monsanto verdict, [Novato Mayor Josh Fryday said the city will no longer use Roundup weed killer.](#)
- Oakland, CA – [Passed ordinance initiating Integrated Pest Management program](#) that restricts toxic pesticide use and promotes pesticide use as last resort. On Sept. 1, 2018, the city [formally halted the use of Roundup.](#) Alameda County is reviewing its chemical spraying practices.
- Orange County, CA – [Restricted/Discontinued](#) the use of glyphosate. *
- Oxnard, CA – [The Oxnard School District board voted to ban Roundup use on campuses.](#)
- Palo Alto, CA – [Pest management program](#) calls for Integrated Pest Management that restricts pesticide use in favor of less harmful methods.
- Petaluma, CA – City officials are [considering a ban on glyphosate for use in public parks.](#)

- Richmond, CA – Issued an ordinance to [ban the use of glyphosate for all weed abatement activities conducted by the city](#).
- San Anselmo, CA – [Passed city resolution promoting an Integrated Pest Management program](#) restricting the use of toxic pesticides. The program only allows pesticide use as a last resort.
- San Francisco, CA – [Restricts the use of toxic pesticides](#) on public property in favor of alternative, organic methods.
- San Juan Capistrano, CA – [Implemented an organics-first policy to control weeds in city parks and open spaces](#).
- San Lorenzo Valley, CA – The San Lorenzo Valley Water District voted 4-1 [for a permanent ban of glyphosate pesticide use by the district](#).
- San Luis Obispo, CA – San Luis Coastal Unified School District banned all pesticides, including Roundup, on school properties. Coast Unified School District has banned Roundup.
- Santa Rosa, CA – [Banned the use of Roundup at city parks](#).
- Sonoma, CA - [Restricted/Discontinued](#) the use of glyphosate. *
- Thousand Oaks, CA – [City instituted a ban on glyphosate use on public golf courses](#).
- Watsonville, CA – [Restricted/Discontinued](#) the use of glyphosate. *
- Woodland, CA – Woodland Joint Unified School District [suspended the use of Roundup on school campuses](#).

Colorado

- Boulder, CO – [Banned Roundup for use on city parks](#).
- Durango, CO – [Instituted an Organically Managed Lands program](#) to minimize the use of synthetic fertilizers and pesticides.

Connecticut

- Middletown, CT – [Passed ordinance banning toxic pesticides and herbicides on municipally-owned fields, parks and other property](#).

[A growing number of Connecticut towns](#), including Branford, Cheshire, Granby, Essex, Greenwich, Manchester, Plainville, Roxbury, Watertown, and Woodbridge have adopted bans or restrictions on glyphosate use. The state also has Public Act 09-56 to eliminate the use pesticides in K-8 schools.

Florida

The Florida Fish and Wildlife Conservation Commission [ceased using aquatic herbicides, glyphosate chief among them, anywhere in state waters](#), while the agency gathers public input.

- Fort Myers, Florida- [Restricted/Discontinued](#) the use of glyphosate. *
- Indian River County, Florida- [Restricted/Discontinued](#) the use of glyphosate. *
- Key West, Florida- [Restricted/Discontinued](#) the use of glyphosate. *
- Martin County, Florida- [Restricted/Discontinued](#) the use of glyphosate. *
- Miami, FL – [Announced a city-wide ban on glyphosate-based herbicides in February of 2019](#).
- Miami Beach, FL – [Passed a resolution banning the use of glyphosate weed killers for landscaping and maintenance work on city-owned property](#).
- North Miami, FL – City Council approved a plan [calling for the gradual reduction of pesticide](#) use on city property and a study on alternative pesticides.
- Satellite Beach, FL – [Restricted/Discontinued](#) the use of glyphosate. *
- Sebastian, Florida- [Restricted/Discontinued](#) the use of glyphosate. *
- Stuart, FL – City commissioners [voted to ban glyphosate](#), calling for an integrated pest control plan that reduces the use of glyphosate with the ultimate goal of eliminating chemicals.
- Vero Beach, Florida- [Restricted/Discontinued](#) the use of glyphosate. *

Hawaii

Hawaii County Council approved a bill that would prohibit use of herbicides like Roundup on public parks, roads, bike routes, trails, sidewalks and elsewhere. Would take effect in 2024.

Illinois

- Chicago, IL – [The city stopped spraying glyphosate in public spaces](#).
- Evanston, IL – Evanston decided to go pesticide-free in 2010. [Glyphosate is banned from use on city property, parks and schools](#).

- Franklin Park, IL – [Passed resolution](#) promoting an Integrated Pest Management (IPM) policy that restricts highly toxic pesticides and urges for pesticides to be considered as a last resort.
- Naperville, IL – [Created the Sustainable Parks Initiative](#), which uses organic products and sustainable practices for weed control.
- Urbana, IL – Adopted the [Midwest Grows Green natural lawn care initiative](#) to eliminate synthetic lawn pesticides on city parks.

Iowa

- Dubuque, IA – [City instituted a ban on glyphosate use in public parks](#).
- Story County, IA – Eliminated use of chemical pesticides in six of its mowed turf areas.

Kansas

- Lawrence, Kansas – [Implemented Integrated Pest Management \(IPM\) program](#) designed to reduce pesticide use.
- Wichita, Kansas – [Initiated pilot program that limits or eliminates pesticide use](#).

Maine

[Dozens of cities and townships in Maine](#) have adopted local ordinances restricting or banning pesticides and herbicides.

- Portland, Maine – [Banned synthetic pesticides in March of 2019](#). Private property owners may only use organic treatments on lawns and gardens. No pesticides may be used within 75 feet of a water body or wetland.
- South Portland, Maine – [Passed a pesticide plan](#) that discourages property owners from using certain pesticides and herbicides.

Massachusetts

- Chatham, Massachusetts – Passed an order banning glyphosate use in parks, athletic fields, mulch beds and walkways.
- Eastham, MA – [Local ordinance](#) requires town employees to receive a permit for use of registered pesticides and prohibits the use of highly-toxic pesticides.
- Falmouth, MA – [Issued a yearlong moratorium on glyphosate use](#).
- Marblehead, MA – Created [Organic Pest Management program](#) to phase out pesticides and herbicides.
- Warwick, MA – [A measure to ban Monsanto's Roundup passed at a Special Town Meeting](#). The ban does not allow people to spray glyphosate on any land within the town.
- Wellesley, Massachusetts – Wellesley banned all pesticides in 2011. [Glyphosate is restricted from being sprayed on athletic fields and any city-owned property](#). The chemical can be used in limited emergency weed control situations.

Minnesota

- Minneapolis, MN – Commissioners of the Minneapolis Parks and Recreation Board decided to [eliminate all glyphosate-based products from being used in neighborhood parks](#). In October of 2018, the Park Board's Operations & Environment Committee [voted to extend the glyphosate ban](#) to the entire Minneapolis park system.
- Rochester, MN – [The Parks & Recreation Department initiated a pesticide-free pilot project for city parks](#).

Nevada

- Reno, NV – [The city initiated a pesticide free pilot program](#).

New Hampshire

- Dover, NH – [Passed resolution calling for Organic Land Management](#). City utilizes least toxic compounds only when necessary.
- Portsmouth, NH – [Passed resolution](#) eliminating the use of toxic pesticides on public property in favor of alternative, organic methods.

New Mexico

- Bernalillo County, NM – [Abandoned the use](#) of Roundup in April 2020. *
- Las Cruces, NM – City Council voted to ban Roundup and glyphosate for pest control on city property.
- Taos County, NM – [Taos County Commissioners are considering the possibility of banning all pesticides, including glyphosate](#).

New Jersey

[New Jersey has State and local ordinances](#) encouraging Integrated Pest Management programs to eliminate or drastically reduce the use of pesticides. At least 15 city school districts and over a dozen other parks and recreation departments in the state have enacted IPM programs.

New York

[New York's Park and Recreation Department](#) has measures to eliminate or reduce pesticide and herbicide use in areas under its control.

- New Paltz, NY – The use of toxic pesticides and herbicides by city employees or by private contractors is [forbidden on all city-owned lands](#).
- Rockland County, NY – [Created a Non-Toxic Pesticide program](#), mandating the use of natural, non-toxic, or as a last resort with prior approval, the least toxic pesticide use.
- Westchester County, NY – [Enacted a law for pesticide-free parks](#).

North Carolina

- Carrboro, NC – [The city of Carrboro has restricted glyphosate use since 1999](#). Glyphosate cannot be sprayed in public parks, schools and town buildings or properties. The city will only allow glyphosate to be sprayed under limited circumstances.

Ohio

- Cuyahoga County, OH – [Local ordinance prohibits](#) the use of pesticides on county-owned land, and established the adoption of an Integrated Pest Management program for county-owned properties.
- South Euclid, OH – [Passed ordinance](#) prohibiting toxic pesticides on public grounds in favor of alternative, organic pest control methods unless permitted by an Environmental Review Board.

Oregon

- Portland, OR – Since 1988, Portland has restricted the use of Roundup to emergency use only. [Glyphosate is banned on all city-owned property](#).

Texas

- Denton, TX – [The city ended the use](#) of glyphosate herbicide and is piloting an integrated pest management program that favors organic methods for city-owned parks. *
- Austin, TX – [City Council voted to prohibit the spraying of glyphosate on city lands](#).

Virginia

- Charlottesville, VA – [Restricts the use of glyphosate on any city-owned parks, schools, or buildings](#). Glyphosate can only be sprayed under limited circumstances.

Washington

- King County, WA – [Passed municipal ordinance](#) initiating an Integrative Pest Management (IPM) program to determine if and how pesticides should be used.
- Kitsap County, WA – Banned glyphosate spraying by workers on county-owned and maintained properties, but it may be used on noxious weeds as a tool of last resort.
- Olympia, WA – [City passed a resolution](#) to encourage the implementation of an Integrative Pest Management (IPM) program for non-chemical pest control.
- Seattle, WA – [Officials restricted Roundup](#) to only be used as the last resort and other herbicides containing the active ingredients triclopyr and imazapyr, should be used first. *
- Thurston County, WA – [Passed municipal ordinance](#) to restrict the use of toxic pesticides on public property.

Countries Where Glyphosate is Restricted or Banned

- **Argentina:** [More than 400 towns and cities in Argentina](#) have passed measures restricting glyphosate use.
- **Australia:** [Numerous municipalities and school districts](#) throughout the country are currently testing alternative herbicides in an effort to curtail or eliminate glyphosate use. [Many use steam technology for weed control](#) on streets and in other public areas.
- **Austria** – [In July 2019 the Austrian Parliament](#) voted in favor of banning glyphosate completely in the country. This ban was later delayed and the situation surrounding the ban is still unclear. *

- **Bahrain** – [Six Middle Eastern countries banned](#) the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Belgium:** [Banned the individual use of glyphosate](#). In 2017, Belgium voted against relicensing glyphosate in the EU. The country was also one of six EU member states to sign a letter to the EU Commission calling for “[an exit plan for glyphosate...](#)” The city of Brussels banned the use of glyphosate within its territory as part of its “[zero pesticides](#)” policy.
- **Bermuda:** [Outlawed private and commercial sale of all glyphosate-based herbicides](#). In 2017, the government relaxed its ban on glyphosate, allowing the Department of Environment and Natural Resources to import [restricted concentrations of glyphosate](#) for managing roadside weed overgrowth.
- **Brazil:** In August of 2018, [a federal judge in Brasilia ruled](#) that new products containing glyphosate could not be registered in the country. Existing regulations concerning glyphosate were also suspended, pending a reevaluation of toxicological data by Anvisa, the country’s health agency. In September of 2018, [a Brazilian court overturned the federal judge’s ruling](#). September marks Brazil’s first month of soybean planting. The country is the largest exporter of soybeans in the world, and as such, has become heavily reliant on agrochemicals. Anvisa issued a statement following the court’s decision to overturn the ruling, saying it will take necessary legal and technical steps in response. Further, Brazil’s Solicitor General’s office has said it is preparing an appeal to the court decision with support from the Agriculture Ministry.
- **Canada:** [Eight out of the 10 provinces in Canada](#) have some form of restriction on the use of non-essential cosmetic pesticides, including glyphosate. [Vancouver has banned public and private use of glyphosate, aside from the treatment of invasive weeds](#).
- **Colombia:** [In 2015, Colombia outlawed the use of glyphosate to destroy illegal plantations of coca](#), the raw ingredient for cocaine, out of concern that glyphosate causes cancer. However, in January of 2017, the country [reinstated its controversial glyphosate fumigation program for coca](#). Unlike the previous program, which used aerial fumigation, the new program consists of manual spraying from the ground.
- **Costa Rica:** [In December 2019 Costa Rica’s National System of Conservation Areas \(SINAC\) banned the use of glyphosate herbicides in all protected wild areas in the country as well as on all SINAC owned land.](#) *
- **Czech Republic:** Agriculture Minister Miroslav Toman said the country [will limit glyphosate use starting in 2019](#). Specifically, the Czech Republic will ban glyphosate as a weedkiller and drying agent.
- **Denmark:** [The Danish Working Environment Authority declared glyphosate to be carcinogenic](#) and has recommended a change to less toxic chemicals. [Aalborg, one of the largest cities in Denmark, issued private-use glyphosate ban in September of 2017](#). In July of 2018, the Danish government [implemented new rules](#) banning the use of glyphosate on all post-emergent crops to avoid residues on foods.
- **El Salvador:** [Banned glyphosate over links to deadly kidney disease](#).
- **England:** Following the landmark [\\$289 million Monsanto Roundup verdict on Aug. 10, 2018](#), Homebase, one of England’s largest DIY retailers, announced that it would [review the sale of Roundup and Ranger Pro](#). A number of townships, including [Brighton, Frensham, Hammersmith & Fulham, Bristol, Glastonbury, Frome, Erewash, North Somerset](#), Lewes and Wadebridge have also voted to institute restrictions on pesticides and herbicides, including glyphosate.
- **France:** [French authorities banned the sale, distribution and use of Roundup 360 in early 2019](#). In May of 2019, French Agriculture Minister Didier Guillaume announced that [France would eliminate the use of glyphosate by 2021 with limited exceptions](#).
- **Germany:** Environment Minister announced Germany will ban glyphosate by 2023. This includes a “systemic reduction strategy” prohibiting glyphosate spraying in domestic gardens and on the edges of farmland.
- **Greece:** Greece was one of nine EU countries to vote against relicensing glyphosate in November of 2017. The country was also one of six EU member states to sign a 2018 letter to the European Commission calling for “[an exit plan for glyphosate...](#)” [According to Greek Minister of Agricultural Development Evangelos Apostolou](#), “[i]t is our duty to push in the direction of risk management, in the interests of consumers, producers and the environment.” In March of 2018, the Greek government approved a five-year license for Monsanto’s Roundup [against the wishes of Greek environmentalists](#).

- **India:** In October of 2018, the government of Punjab [banned the sale of glyphosate in the state](#). “All pesticide manufacturers, marketers and dealers in the State shall not sell glyphosate formulations-concentrations with immediate effect. The licensing authorities have been asked to take necessary steps for removal of entries for glyphosate from the licenses issued by them,” said State Agriculture Secretary K.S. Pannu.
- **Italy:** [Italy’s Ministry of Health placed a number of restrictions on glyphosate use](#). Italian legislators have also raised concerns about glyphosate safety, and have [come out against relicensing the herbicide in the European Union](#). In 2016, the Italian government banned the [use of glyphosate as a pre-harvest treatment](#) and placed restrictions on glyphosate use in areas [frequented by the public](#). In November of 2017, Italy was one of seven EU nations to vote against relicensing glyphosate.
- **Kuwait – Six Middle Eastern countries banned** the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Luxembourg:** [One of Luxembourg’s largest supermarket chains removed glyphosate from its shelves](#) following the release of the IARC glyphosate report. Luxembourg was one of nine EU countries to vote against relicensing glyphosate in November of 2017, and in early 2018, the country signed a letter to the EU Commission calling for [“an exit plan for glyphosate...”](#)
- **Malawi – Malawi’s Ministry of Agriculture, Irrigation and Water Development** announced the suspension of import permits for glyphosate in April 2019 *
- **Malta:** Malta began the process of instituting countrywide ban of glyphosate. However, Environment Minister José Herrera backtracked in January of 2017, saying the country [would continue to oppose glyphosate](#) in discussions but would fall in line with the European Union and wait for further studies. In November of 2017, Malta was one of nine EU countries to vote against relicensing glyphosate. The country also signed a letter to the EU Commission in 2018 calling for [“an exit plan for glyphosate...”](#)
- **Mexico:** [The Secretariat of Environment and Natural Resources](#) (SEMARNAT), Mexico’s Environment Ministry, announced in June 2020 that glyphosate-based herbicides will be phased out of use in the country by 2024 to protect human health and the environment. *
- **Netherlands:** [Banned all non-commercial use of glyphosate](#).
- **New Zealand:** [The cities of Auckland and Christchurch](#) passed resolutions to reduce the usage of chemicals for weed and pest control in public places. [The Physicians and Scientists for Global Responsibility, a New Zealand charitable trust, called for a glyphosate ban in 2015](#).
- **Oman – Six Middle Eastern countries banned** the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Portugal:** Prohibits the use of glyphosate [in all public spaces](#). President of the Portuguese Medical Association has also [called for a worldwide ban of glyphosate](#).
- **Qatar – Six Middle Eastern countries banned** the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **St. Vincent & the Grenadines –** has suspended import of glyphosate-based herbicides.
- **Saudi Arabia – Six Middle Eastern countries banned** the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Scotland:** [Aberdeen cut back its use of herbicides](#) and [Edinburgh’s City Council voted to phase out glyphosate](#). In November of 2017, [five of Scotland’s six EU parliamentarians voted in favor of a motion that would phase out glyphosate by 2022](#).
- **Slovenia:** Slovenia was one of six EU member states to sign a 2018 letter to the European Commission citing “concerns” about the risks associated with glyphosate. The letter called upon the Commission to [introduce “an exit plan for glyphosate...”](#)
- **Spain:** [According to Kistiñe Garcia of the Spanish NGO, Ecologistas en Acción](#), Barcelona, Madrid, Zaragoza and the region of Extremadura have decided to ban glyphosate. The regions of La Rioja (major Spanish wine region) and Aragon have also approved motions against endocrine disrupting chemicals, which includes glyphosate.
- **Sri Lanka:** [Sri Lanka was the first country to issue a nationwide ban on glyphosate](#). However, in 2018, [the government decided to lift the ban](#) due to crop losses and overgrowing weeds.

- **Sweden:** Raised concerns about glyphosate safety and has [pushed against relicensing the herbicide in the EU](#). In 2017, the [Swedish Chemicals Agency \(SCA\) announced it was planning to tighten rules on private use of plant protection products](#). Under the plan, private users would only be allowed to use products containing “low-risk substances.” According to the SCA, glyphosate is an example of an active substance not expected to be included among low-risk substances, meaning in due time, private consumers may not be permitted to use herbicides containing glyphosate.
- **Switzerland:** Concerned about public wellbeing, the [Swiss supermarket chains Migros and Coop removed glyphosate-based products from their shelves due to health risks](#). In 2017, the Green party [put forth a plan to ban glyphosate in Switzerland](#). The proposed plan was rejected by the Federal Council, Switzerland’s executive.
- **Togo:** [In the West African country of Togo](#), it is now prohibited to ‘import, market or use glyphosate and any product containing it’ *
- **Thailand:** [Thailand’s National Hazardous Substances Committee](#) voted to ban glyphosate and chemicals paraquat and chlorpyrifos from December 2019. This ban was later changed from a ban to a [restriction on use](#). *
- **United Arab Emirates:** [Six Middle Eastern](#) countries [banned](#) the import and use of glyphosate-based herbicides in coordination with each other in 2015 and 2016. *
- **Vietnam:** [Vietnam announced that it banned](#) the import of all glyphosate-based herbicides with in March 2019 following a cancer trial verdict from San Francisco *

* Denotes new additions to list made on 1/22/21

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