

GLYPHOSATE Myth Buster



Glyphosate isn't the only pesticide applied in towns and cities but it is certainly the most widely-used. It is sprayed by local councils as a weedkiller in parks, playgrounds and other green spaces, road verges, cemeteries, pavements and around council houses. Land managers other than councils also use it in a range of spaces including university campuses, car parks, hospitals, private housing developments, shopping centres and schools.

Concerned citizens wanting their council (or other land managers) to stop using glyphosate come up against the same objections time and time again. This guide arms local pesticide-free campaigners with the information they need to counter these objections and help spread the word that glyphosate use in towns and cities is entirely unnecessary, and that viable alternatives are available.

This leaflet is part of PAN UK's Pesticide-Free Towns campaign. For other materials, including a guide to starting your own Pesticide-Free Towns campaign, or to find out if there is already a campaign in your local area please visit our website at www.pan-uk.org/pesticide-free.

Many local councils and other land managers will tell you that...

The EU and UK government say that glyphosate is safe.

In November 2017, EU Member States narrowly voted to relicense glyphosate for five years. Many have chosen to misinterpret this decision as a declaration that glyphosate is 'safe'. However, due to concerns over its human health and environmental impacts, glyphosate was in fact relicensed with the condition that Member States "**Minimise the use in public spaces, such as parks, public playgrounds and gardens.**" This has unfortunately been ignored by the UK government and many local councils.

Despite the EU decision, many countries remain deeply concerned that glyphosate is harming human health and the environment. As a result, it has already been banned from use in urban areas in France, Luxemburg, Italy, Belgium and the Netherlands, with Germany committing to a total ban (including in farming) by 2024. Huge problems have also been identified with the process used by the EU to reach the 2017 decision to relicense glyphosate which has been found to be opaque and therefore susceptible to manipulation by the pesticide industry. However, despite the widespread acknowledgment that the

EU process was deeply flawed, the UK government, and many local authorities, continue to justify their support for glyphosate by quoting the EU decision.

The EU was required to decide whether to reapprove glyphosate in December 2022. However, saying that they didn't have sufficient time to review all the required studies, the European Commission decided to delay this decision and, instead, chose to grant glyphosate a one-year approval extension until December 2023, causing public outrage.

In the UK, due to a lack of capacity post-Brexit, the UK government decided to grant an automatic three-year extension to all pesticides due to be reapproved in the EU before the end of 2023. Unfortunately, this includes glyphosate which is now approved for use in the UK until at least the end of 2025.

Meanwhile, in the US, there have been a spate of court cases linking Monsanto's Roundup – which contains glyphosate as its key ingredient – to the potential risk of contracting Non-Hodgkin lymphoma (a type of cancer). It is worth noting that the majority of these cases have concerned non-agricultural activities such as grounds maintenance and landscape gardening.



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Landmark legal defeats for Monsanto (now Bayer) have resulted in jury verdicts worth billions. In July 2021, with more than 30,000 cancer-related legal cases reportedly pending, Bayer announced that it would end the sale of glyphosate-based weedkillers to American consumers by 2023. The company said that their decision to restrict the sale of glyphosate-based products solely to US farmers was “exclusively geared at managing litigation risk and not because of any safety concerns”.

Urban glyphosate use doesn't affect the environment.

Glyphosate has been designed to kill not only unwanted weeds but all plants. Due to habitat loss in the countryside, and the large quantities of pesticides used in UK agriculture, wildlife (including birds, insects, bees and hedgehogs) is increasingly seeking refuge in our towns and cities. But the overuse of glyphosate is destroying many of the areas where they forage for food, and contaminating the natural resources they depend upon. In addition, glyphosate will often run off hard surfaces such as pavements and paths, contaminating water courses and harming aquatic wildlife in the process.

Glyphosate doesn't harm the health of humans or animals.

While much of the health debate around glyphosate has focused exclusively on whether it causes cancer, independent scientists from around the world largely agree that long-term exposure to glyphosate is harmful to human health in a whole range of ways and can cause conditions such as kidney and liver disease, act as an endocrine and immune system disrupter, and result in reproductive and neurological problems.

In March 2015, the International Agency for Research on Cancer (part of the UN World Health Organisation) declared glyphosate to be genotoxic (it causes DNA damage), carcinogenic to animals, and a “probable carcinogen” for humans. This ruling was based on a review of one thousand publicly available scientific studies by independent experts, free from vested interests. This is in contrast to the EU decision which took into account studies funded by the pesticide industry which were not in the public domain.

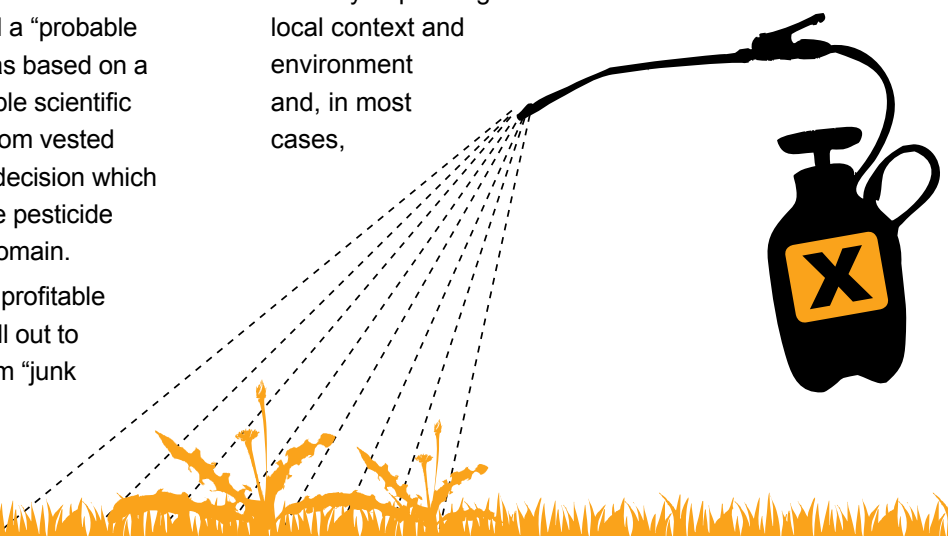
In an effort to defend one of its most profitable products, the pesticide industry went all out to discredit the IARC findings, calling them “junk

science” and based on an “agenda-driven bias.” The industry has so far spent huge amounts of time and money telling people that glyphosate doesn't harm human health and undermining scientists and institutions that say otherwise. Despite their best efforts however, the American court case rulings linking Roundup to cancer continue to undermine the safety claims put out by the pesticide industry.

The UK claims it takes a precautionary approach to pesticides and the scientific evidence that glyphosate harms human health is certainly sufficient to ban its use. Evidence to the contrary is often funded or influenced by the pesticide industry, which is likely to lose billions of dollars in sales if glyphosate loses its license. Glyphosate has also been known to cause injury to pets, most commonly to dogs but also cats and horses. Exposure tends to happen either directly through the skin or orally if an animal eats grass or plays with objects that have come into contact with glyphosate. In dogs, the most common symptoms included vomiting, hyper-salivation and diarrhoea due to gastrointestinal irritation. In severe cases, acute poisoning could lead to death.

Glyphosate is the only effective option for dealing with weeds. If we stop using glyphosate, we will have to use pesticides that are more harmful.

There are a rising number of non-chemical alternatives to glyphosate including hot foam systems, acetic acid dilutions and electronic control systems. More traditional methods such as mulching and hand-weeding also go a long way to reducing weeds. One huge advantage of these non-chemical approaches is that, unlike glyphosate, they can be deployed in all weather conditions so councils are able to plan ahead and don't have to wait for days with no rain or wind. The effectiveness of each method will vary depending on the local context and environment and, in most cases,



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there won't be one silver bullet to replace glyphosate. Instead, a suite of different approaches will be required. There is also a growing understanding that, where possible, plants should be left to grow in order to provide precious habitat for urban wildlife and help deal with the biodiversity and climate crises. Instead of simply looking for alternatives to glyphosate, local councils and other land managers should consider which areas need to be cleared of weeds for access or infrastructure reasons and which can be managed in a more natural way, or even left to go wild.

PAN UK is keen to work directly with councils and other land managers to devise bespoke strategies for ending pesticide use tailored to fit their local context.

If we stop using glyphosate members of the public will complain about weeds.

Raising public awareness is absolutely key to the success of ending glyphosate use. After all, weeds are arguably just plants in the wrong place and we need to change the mind-set which sees manicured grass as beautiful and wildflowers as 'messy'. It's therefore vital that councils communicate their plan of action, and their reasons for change, to the public. If local residents understand the health and environmental benefits of ending glyphosate use they are much more likely to support the initiative and accept a higher level of 'weediness'. It is also possible to get local volunteers to help with jobs such as hand weeding.

Glyphosate is the only cost-effective way for dealing with weeds.

Advances in technology and rising demand for non-chemical methods of weed control mean that the costs of alternatives to glyphosate are falling and are, in many cases, comparable to a conventional pesticide-based regime. After all, using glyphosate does incur significant, ongoing costs which mustn't be forgotten.

However, transitioning away from glyphosate will often involve a one-off purchase of expensive equipment such as a hot foam machine. The ongoing costs of weed control will come down over time but, in the age of austerity, it's important that councils in particular are able to recoup, or share, this initial outlay and there are a range of innovative ways for doing so. Options for councils to consider include; sharing the initial cost of the machine with one or more adjacent council; hiring the equipment out to neighbouring councils or local land managers; getting the council's contractor to buy the

machine. These options are made possible by the fact that, unlike glyphosate, many of the new non-chemical approaches such as hot foam systems can be used in all weather conditions. Councils don't tend to need more than fifty days per year of use so the machine is available to be hired out to others the remainder of the time.

For more information on non-chemical alternatives to glyphosate, see our "[Alternatives to Herbicides: A Guide for the Amenity Sector](#)"

We outsource weed control and our contractor (or sub-contractor) uses glyphosate.

As the client, the council has the power to insist that a contractor stops using glyphosate and makes the switch to non-chemical alternatives. In fact, many contractors will be supportive of the change as it reduces the exposure of its staff to harmful chemicals. Adopting a non-chemical approach can also be seen as a business opportunity by contractors. For example, the contractor used by Lewes District Council bought a hot foam system when the council banned glyphosate. The company uses it just thirty days per year for the council and for other customers the rest of the time.

The council will almost certainly have contracts in place with its contractors which stipulate pesticide use. Ideally, these will be renegotiated or rewritten but, at worst, this may have to wait until the end of the contract period.

We have to use glyphosate to deal with invasive species.

This is a serious concern for local authorities and other land managers as there are legal requirements and health and safety issues that mean invasive species such as Japanese knotweed and giant hogweed need to be controlled and eradicated.

There are non-chemical alternatives available such as electronic control systems that kill stems and roots instantly. However, if the council is unwilling to stop using glyphosate then a technique such as stem injection should be employed. Stem injection can be used on Japanese knotweed and other hollow stemmed invasive species and, since the glyphosate is injected directly into the stem rather than being applied by a foliar spray, it reduces the amount used as well as the possibility of it drifting onto adjacent areas or leaching into water. A number of companies currently provide stem injection systems in the UK and offer training courses on its use.



What further support can PAN UK offer you?

PAN UK is keen to provide further information, expertise and advice as you develop your Pesticide-Free Towns campaign. We have created a suite of materials that are available on our website and can also connect you with other citizens concerned about pesticides in your local area.

We are also happy to support you by speaking directly to your local councillors or other land managers so feel free to put us in touch.

PAN UK

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WEBSITE: www.pan-uk.org/pesticide-free



Where to look for more detailed information on glyphosate?

PAN International, The Glyphosate Monograph: A comprehensive new review of the science documenting the adverse human health and environmental impacts of glyphosate and glyphosate based herbicides, October 2016, http://issuu.com/pan-uk/docs/glyphosate_monograph_complete?e=28041656/43997864

International Agency for Research on Cancer, Glyphosate Monograph, 2015, <http://monographs.iarc.fr/ENG/Monographs/vol112/mono112-10.pdf>

International Agency for Research on Cancer, Q&A on Glyphosate (in response to criticism of the IARC Glyphosate Monograph), March 2016, https://www.iarc.fr/en/media-centre/iarcnews/pdf/Q&A_Glyphosate.pdf

Stacey Malkan, Kendra Klein PHD and Anna Lappe, Merchants of Poison: How Monsanto Sold the World on a Toxic Pesticide, December 2022, https://usrtk.org/wp-content/uploads/2022/12/Merchants_of_Poison_Report_final_120522.pdf

Professor Olivier De Schutter, Why the Commission's renewal of the authorization to place glyphosate on the EU market should be annulled, December 2017, <http://extranet.greens-efa-service.eu/public/media/file/1/5422>

Claire Robinson MPhil and Helmut BurtscherSchaden PhD, A failure in regulatory assessment How industry strategized (and regulators colluded) in an attempt to save the world's most widely used herbicide from a ban, July 2017, <http://www.pan-germany.org/download/glyphosate/GLO%2002%20Glyphosat%20Summary%20EN.pdf>

An open letter from ninety-six independent scientists, Open letter: Review of the Carcinogenicity of Glyphosate by the European Food Safety Authority and Bundesinstitut für Risikobewertung, November 2015, https://www.efsa.europa.eu/sites/default/files/Prof_Portier_letter.pdf

PAN UK, map of pesticide-free town campaigns and pesticide bans in the UK, updated regularly, <https://www.pan-uk.org/make-my-town-pesticide-free/>

Law firm Baum Hedland's summary of the US court cases on Roundup, <https://www.baumhedlundlaw.com/toxic-tort-law/monsanto-roundup-lawsuit/roundup-settlement/>

PAN UK, Herbicides: A threat to bee and pollinator survival, October 2021, <https://www.pan-uk.org/herbicides-and-pollinators/>

Who are Pesticide Action Network UK?

PAN UK is based in Brighton. We are the only UK charity focused solely on addressing the harm caused by chemical pesticides.

We work tirelessly to apply pressure to governments, regulators, policy makers, industry and retailers to reduce the impact of harmful pesticides.

Find out more about our work at:
www.pan-uk.org/pesticide-free

Support Pesticide Action Network UK

You can donate to PAN UK at: www.justgiving.com/pesticideactionnetworkuk or text **PEST23 £3/£5/£10** to **70070** (e.g. Text PEST23 £3 to donate £3)

Contact PAN UK

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