



Ending Pesticide Use in UK Schools



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Schools should be safe spaces for our children to learn and play. This means creating an environment that reduces the risk of harm and protects children's health. Yet many school grounds are regularly sprayed with pesticides, exposing children to potentially harmful chemicals.

Children are more vulnerable than adults to the negative health impacts associated with pesticide exposure. They are more likely to spend time in areas that have been treated (i.e. grass or tarmacked play areas where weeds are sprayed with herbicide) and their bodies are less able to cope with toxins. When we have a chance to eliminate the risks of pesticide exposure to children, why wouldn't we?

A poll carried out for PAN UK showed that 68% of the UK public want their schools, parks, playgrounds and other open spaces in their local area to be pesticide-free, yet the vast majority of our schools in the UK are still managed with pesticides. So what's the problem and what can we do about it?

What pesticides are used in schools and why?

There is no existing data specifically on the use of pesticides in UK schools. However in 2016, the Health and Safety Executive carried out a survey on the use of pesticides in the amenity sector (responsible for management of weeds, pests and diseases), which operate in schools across the country. The survey found that:

- 🔥 38 different active substances are used in the amenity sector.
- 🔥 80 tonnes of active substance covering a treated area of 98,121 hectares were applied by those responding to the survey – this is an underestimation of the actual amount being used.
- 🔥 The most widely used class of pesticides were herbicides (commonly known as 'weedkillers'), accounting for 98.8% of the total pesticides applied.
- 🔥 Glyphosate was by far the most widely applied herbicide accounting for 77% of active substances applied – 61,249kg.

Focus on glyphosate

It is likely that a pesticide product containing glyphosate is used to manage the grounds of schools in your local area. Glyphosate is the active ingredient in a range of products, the most common being Roundup. How often each school's grounds are sprayed and with what specific product will vary from school to school.

Is it safe?

Concerns are now being raised about the health effects of glyphosate. It has been linked to neurodevelopmental, kidney and liver problems and behavioral issues in children. In May 2015, the World Health Organization concluded that glyphosate was 'probably carcinogenic' to humans. Despite this, in 2017, EU Member States narrowly voted to relicense glyphosate for five years (instead of the usual fifteen). This decision is often misinterpreted as a declaration that glyphosate is 'safe'. However, 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 many schools and the argument over whether glyphosate is harmful to human health continues. When the evidence is contested, we should always take a precautionary approach, especially when it concerns children.

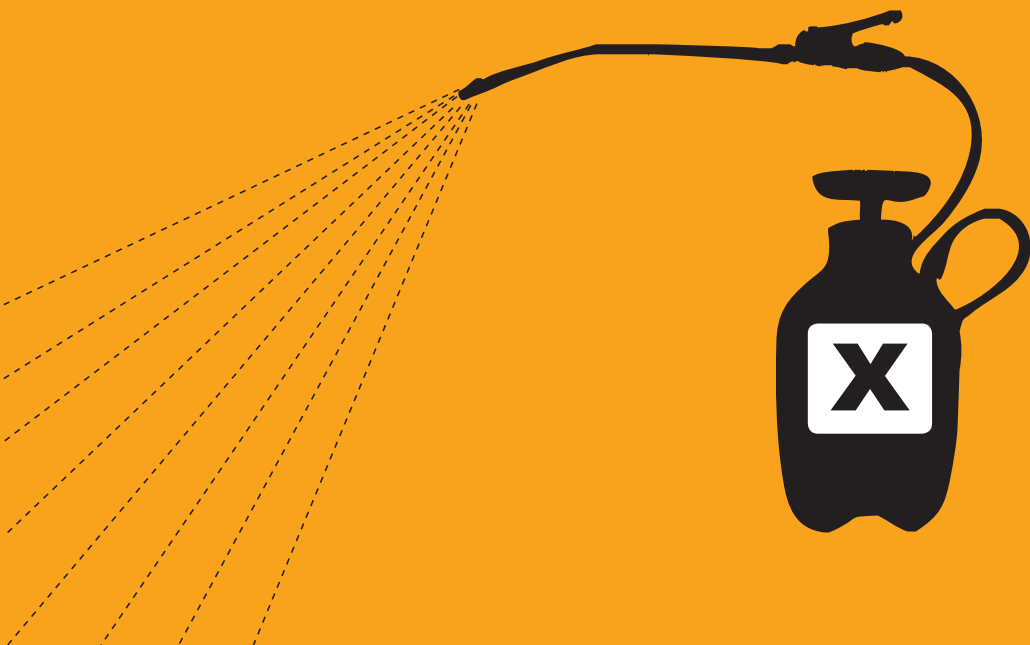


Dewayne Johnson court case - schools groundskeeper

It is not only children who can be harmed by pesticide use in schools, but also the workers responsible for applying them. Dewayne Johnson was a school groundskeeper in California, who was diagnosed with terminal non-Hodgkin's lymphoma (a form of cancer) in 2014.

His job was to routinely spray glyphosate-based herbicides on the school grounds to control weeds. In 2018, a jury in California unanimously ruled that the design of Monsanto's Roundup – which contains glyphosate as its key ingredient – was a substantial factor in causing harm to the plaintiff. The case also found that Monsanto failed to warn Mr Johnson of the carcinogenic effects of its glyphosate-based products (Roundup Pro and Ranger Pro), and Johnson was awarded \$78 million in damages. There have been two other successful cases against Monsanto over glyphosate, and there are around 11,000 cases pending.

Whilst there are no similar cases yet in the UK, in 2018 the GMB Union said that *'glyphosate must be treated as a severe health risk to the general public'* and called for the UK government to introduce an immediate ban. The GMB is a trade union representing around 630,000 workers, including those most at risk from exposure to glyphosate including parks staff, gardeners and groundskeepers (some of which will work in schools).



Children and pesticide exposure

Children are more at risk from pesticides, in part, because they have higher exposure rates than adults:

- 🔥 Their behaviour – crawling and playing in areas treated with pesticides or putting contaminated objects in their mouth increases their exposure.
- 🔥 They absorb more pesticides through their skin. Not only is a child's skin more permeable than an adult's but their skin surface area relative to body weight is also higher making it easier to absorb higher rates of pesticides – in fact, infants will absorb around three times more pesticides than adults from similar exposure episodes.
- 🔥 They take in more air, water and food relative to their body weight compared to adults, which increases their total exposure. For example, the breathing rate of a child in its first twelve years is roughly double that of an adult.

Not only is exposure likely to be higher in children but they can also be more vulnerable to the effects of pesticides:

- 🔥 The systems that our bodies use to deal with toxins are not as developed in children and this can make them less able to cope with pesticides than adults.
- 🔥 As they grow, children's brains and bodies undergo complex changes that affect tissue growth and organ development. Incidents of exposure that would be tolerated by adults can cause irreversible damage to unborn babies, infants and adolescents.

To find out more See 'Poisoning our Future: Children and Pesticides' at

www.pan-uk.org/effects-pesticides-women-children



Pesticides and biodiversity

One of the main causes of insect decline is habitat loss. When we kill so-called 'weeds' using herbicides (a form of pesticide) we are killing habitats for bees and other pollinators and insects. This has a knock-on effects on birds and other species.

Herbicides can also have an adverse direct effect on insects who are exposed to them. For instance, glyphosate has been shown to negatively affect the health of both bees and earthworms. If we want our children to have a prosperous future, we must look after biodiversity on their behalf and teach them to follow our example.

What are the alternatives?

Some European countries are stopping – or dramatically reducing – the use of weedkillers in public spaces such as schools. France, for instance, has banned all non-agricultural uses of pesticides and are using non-chemical alternatives to manage weeds in their towns and cities, including schools.

There are plenty of viable alternatives to hazardous chemicals, which include: foam and hot water treatments; electronic control systems which are particularly suited to dealing with invasive species such as Japanese Knotweed; acetic acid dilutions which can be particularly effective at controlling weeds on hard surfaces; and manual methods including hoeing, mulching, steel brushing and sweeping. It is also possible to deal with weeds by simply pulling them up by hand. Many schools and other communities have succeeded in going pesticide-free by getting children and other members of the public to help with hand weeding.

Going pesticide-free also requires a change in attitudes to weeds. After all, they are food for the bees and provide habitats for wildlife!



What can you do about it?

1. You will need to get in touch with the people who run your school to find out whether they are using pesticides on school grounds. This could be the head teacher, the governors or another school governing body. They will probably need to ask the school's groundskeepers to get you the detail of which pesticides are used, when and for what purpose.
2. Find out who has the power to stop the use of pesticides in the school, give them the facts, and explore non-chemical alternatives with them. You can find all the information you need, including the Pesticide-Free Towns Campaign Guide, on our website: www.pan-uk.org/pesticide-free
3. If your school still needs some convincing, start a positive campaign with students, parents and teachers involved. This could include: a petition; postcards designed by schoolchildren and sent to the responsible body/person; hold a weeding demonstration where children do the weeding around their school. Get creative! Children often have wonderfully innovative ideas for campaigning for positive change so do try and involve them as much as possible. This will help them to learn about biodiversity, and is a great way of encouraging them to care about nature from a young age.
4. Keep engaging with your school in a friendly and cooperative way. Make sure they have all the information they need to make the transition and offer to work with them to find non-chemical alternatives. Don't give up!

Let's make our schools pesticide-free to keep our children as happy and as healthy as possible!

A Pesticide-Free Towns campaigner won over a school in Newcastle:

"I spoke to the head teacher of the primary school near to where I live about their use of glyphosate on the school grounds. She said that I could explain the issue to the school council which is composed of two children from each year group. They discussed what I told them, agreed with it and made a presentation to the school governors. There is now a ban on using pesticides on the school grounds and the children do the extra weeding themselves."

Who are Pesticide Action Network UK?

We are the only UK charity focused on tackling the problems caused by pesticides and promoting safe and sustainable alternatives in agriculture, urban areas, homes and gardens.

We work tirelessly to apply pressure to governments, regulators, policy makers, industry and retailers to reduce the impacts of harmful pesticides to both human health and the environment.

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

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It doesn't have to be this way...

