



GMB UNION GUIDE

Health Risks of Glyphosate

What is Glyphosate?

Glyphosate is the key ingredient in a powerful herbicide (weedkiller) most commonly known as Roundup, but also known as Accord, Rodeo, Touchdown and Rosate. Developed by the manufacturer Monsanto in the early 1970s, it has been on the market since 1973 and is the most commonly used weedkiller in the world. Glyphosate can be found in many industrial and domestic weedkilling products.

Why is it an issue?

Glyphosate hit the headlines earlier in August, when a jury in the United States awarded Dewayne Johnson \$289M after it determined that glyphosate exposure at work had substantially contributed to his terminal illness diagnosis. Mr Johnson was diagnosed with non-hodgkinson lymphoma.

The trial exposed a range of poor practices by Monsanto, including , the jury found, attempting to muddy the waters over whether glyphosate causes cancer.



Image: Wega52 / Getty Images



What are the risks from Glyphosate?



There have long been concerns over the potential health risks from glyphosate exposure, but the chemicals industry have been quick to point to a lack of research findings pointing to clear harm being proven.

The major health risk identified was until recently concern over stomach bacteria. It can also cause discomfort if it is breathed in. Exposure to the eyes can result in conjunctivitis. If swallowed it may cause corrosion of the throat and can lead to kidney or liver failure.

In March 2015, The World Health Organisation's International Agency on Research into Carcinogens (IARC) announced that glyphosate probably caused a type of cancer called non-Hodgkin's lymphoma. This was based on a study of agricultural workers in Sweden, Canada and the USA who were exposed to the chemical, although it was backed up by tests on animals.

How does glyphosate exposure occur?

The exposure method is unclear. IARC could not determine whether the cancer is being caused by contact through the skin or through breathing it, or both. It is thought that skin contact is the primary route of exposure. It is therefore necessary to try to prevent any workers coming into contact with glyphosate.



Who is at risk?

Glyphosate is commonly used in agriculture, forestry and horticulture. GMB members at potential risk include parks staff, agricultural workers, gardeners, and some forestry workers. It is not only those who spraying the weedkiller who may be at risk, but also those working around them when the herbicide is being applied.

What is the law around using glyphosate?

The HSE has not banned products containing glyphosate, and it is possible to buy them from any garden centre in the UK. But employers have to comply with health and safety law when using the weedkiller. The specific regulations are the Control of Substances Hazardous to Health Regulations 2002 (COSHH). These require the employer to prevent exposure totally wherever possible.

If that is not achievable they should control exposure levels so the risk of harm is 'as low as is reasonably practicable'. This means the employer has to follow a hierarchy of measures:

- Firstly, see if work can be redesigned to avoid using chemicals altogether;
- If this cannot be done, look to replace the chemical with a less dangerous substitute;
- If this is not possible, look to change how the work is organised, usually through automation;
- Where this is not feasible, the employer must provide the appropriate personal protective equipment free of charge.



They also need to provide information and training for all those who use the chemical or who may be exposed. A risk assessment will be required, and this must be performed by a competent person in consultation with the workforce.

Any spraying activity also needs to comply with regulations on the use of herbicide. These state that employers must:

- Take all reasonable precautions to protect human health and the environment;
- Confine the application of the pesticide to the crops or area to be treated;
- Ensure when using pesticides in certain specified areas, e.g. those used by the general public, that the amount of pesticide used and the frequency of use are as low as are reasonably practicable.

Source: TUC

Can I refuse to use products containing glyphosate?

Not at the present time. HSE has not banned or restricted glyphosate containing products, and they have not been withdrawn from sale, although Homebase and Wilko are reviewing their sales policies.

Outright refusal could constitute breach of contract, though all members are entitled to ensure that the correct protective equipment is provided before commencing any work.



Advice from GMB is to:

- Make a formal written request to stop use of Roundup and any other products containing glyphosate.
- Demand substitution with other non-carcinogenic products.
- Where employers refuse substitution, this should be put in writing clearly stating reasons for refusal.
- Demand that risk assessments and COSHH assessments are reviewed
- Demand that suitable personal protective equipment is provided before work begins - full faceplate masks, waterproof jackets, and coveralls.



What have manufacturers done about glyphosate?



Monsanto challenged the IARC finding, and refused to change the packaging of their products to highlight the potential cancer risk.

More significantly, a wider industry body – ‘The Industry Task Force on Glyphosate’, which is made up of Glyphosate producers including Dow, Monsanto, Sygenta and United Phosphorous – has briefed that glyphosate is safe to use.

It is not an impartial institution and its guidance cannot be taken as any more than industrial protectionism.

One of the key outcomes of the Johnson trial in the US was the discovery that Monsanto had suppressed research which highlighted potential links between glyphosate and cancer; had sponsored academics to deliver studies favourable to Monsanto; had written research papers on behalf of academics which suggested that glyphosate was safe (known as ‘ghostwriting’); and used this body of evidence to lobby regulators in the US and EU that glyphosate was considered to pose no hazard to health.

As a result, many employers will still believe that glyphosate is completely safe to use, as there is nothing from the manufacturer suggesting otherwise.



What should employers do?

GMB is clear that the guidance from the World Health Organisation through IARC supersedes any other guidance, and as such glyphosate must be treated as a severe health risk to workers.

GMB is adamant that the precautionary principle must apply in this case. Employers should be substituting products containing glyphosate with safer alternatives that pose a lesser health risk.

A number of Local Authorities in the UK have trialled alternatives to glyphosate, and one Council, the London Borough of Hammersmith and Fulham, has replaced it entirely with a product using steamed sugar-infused water.

Where this is not immediately possible, there is an urgent need for anyone using the substance to have the correct Personal Protective Equipment. Monsanto's own internal research concluded that full faceplate masks, waterproof jackets, and coveralls should be used when applying glyphosate.

Employers will need to review their risk assessments and COSHH assessments to ensure that their health protection regimes are fit for purpose. We also demand that health screening is introduced where workers are exposed on an industrial basis.

This will primarily be anyone spraying weedkiller containing glyphosate industrially, so we anticipate the greatest impact will be on GMB members working for Local Authorities and in the agricultural sector.



What is GMB doing?

Aside from this briefing, we are working with Unionline to develop a register for all members who may have been exposed to glyphosate at work.



Being exposed does not mean that a worker will definitely develop cancer, but those workers who are regularly exposed are likely to be at higher risk, so information on their work history is important if ill-health occurs and a claim needs to be made.

Outside of this, we will continue our campaigning for an outright ban on glyphosate. We will develop a standard letter that members can use to register their concerns and to demand that glyphosate is substituted for other less harmful alternatives.

What can GMB Health and Safety Reps do?

The single most important action is to raise this issue with the employer. There should already be a system in place for managing the health risks, as the IARC decision was made three years ago, but in reality many employers will still believe that glyphosate is safe to use.

Safety reps need to ensure that this is on the agenda at safety committee or works meetings, especially in terms of checking that the PPE is fit for purpose. The most important elements to check are that the PPE protects against mist and water exposure rather than dust, and that the key areas of exposure (hands, mouth, back of the neck) are protected.



Safe Systems of Work/work instructions and training should also be reviewed in conjunction with the workforce. Mr Johnson was spraying at high pressure using a backpack tank, and was covered in the chemical when the system failed, causing his exposure. It is important that the method of spraying is considered, not just the chemicals themselves.

It is vital to speak to colleagues who work with glyphosate or in areas where it is sprayed about the health risks. This is not a disease that takes a long time to develop if exposure is at high levels, and it is possible that members may be experiencing symptoms without knowing it.

Anyone who has developed skin rashes or any other skin complaint should see their GP. If any member has been diagnosed with non-Hodgkin's lymphoma they should contact their Regional Organiser and speak to UnionLine on 0300 333 0303.

Safety reps should also question whether any cases of non-Hodgkin's lymphoma are known to the employer, and ask whether any occupational health referrals have been made from workers who may be exposed regarding rashes or other skin condition, conjunctivitis, or liver/kidney issues.

Once the Glyphosate register is operational, all members who believe they have been exposed are strongly urged to register their details.



