# COVID-19 and Pesticides – a Deadly Combination

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COVID-19 and Pesticides - A Deadly Combination

COVID-19 and the elephant in the room: Aseem Malhotra 16/04/2020

Obesity and chronic metabolic disease are killing COVID-19 patients: now is the time to eat real food, protect the NHS and save lives.

Extracts: “Data from the first 2204 patients admitted to 286 NHS ICU’s with COVID-19 reveal that 72.7% of them were overweight or obese. Several years ago, a senior advisor personally expressed major concern to me about then-Mayor Boris Johnson. “I’m worried about his health Aseem. He’s significantly overweight and doesn’t look well.” This is despite the fact that Boris would regularly cycle to his office at City Hall. There’s no such thing as being fat and fit.

We shouldn’t ignore the fact that 50-60% of the 1.4 million NHS workforce are themselves overweight or obese too, not surprising when more than half of the British Diet is ultra-processed food and three quarters of food purchased in hospitals is unhealthy. South Korea which has one of the lowest prevalence of obesity in the world could in part explain its low mortality rate form the virus. A recent commentary in Nature states that “patients with type 2 diabetes and metabolic syndrome might have to up 10 times greater risk of death when they contract COVID-19” and has called for mandatory glucose and metabolic control of type 2 diabetes patients to improve outcomes. But more clinically important than BMI, tied to waist circumference is the prevalence of chronic metabolic disease which can affect many of “normal” weight.

But why not also ask the public to “quit ultra-processed food”? Observational studies have revealed a clear link between the consumption of such foods with obesity, metabolic disease and cancer.”

What does junk food have to do with COVID-19 deaths?

CDC cites high levels of obesity and diabetes in victims.

Extracts: A five-year-old Michigan girl died on April 19 after being diagnosed with COVID-19. A 50-year-old bus driver, also from Michigan, died on April 1 from complications of the virus. And a 95-year-old Kansas woman who lived in a retirement community died on March 27.

With stunning speed, the novel coronavirus has killed more than 56,000 people living in the United States so far this year. Though most of the more than 1 million known to be infected do not become seriously ill (many do not even show symptoms) those who are hardest hit often suffer frighteningly rapid declines. As scientists struggle to understand the overall magnitude of the virus and how to best address it, there are certain established truths that we can no longer afford to take for granted when it comes to protecting our health in the future.

One key truth: The quality of our food is essential to the quality of our health. The food choices we make every day have a profound long-term impact on virtually every aspect of our well-being. And, as medical professionals track the pandemic, it is becoming increasingly clear just how much that matters in times like these.

Roughly half of the people who have been hospitalized with the new virus are obese, according to data from the Centers for Disease Control and Prevention. The CDC says those individuals who are obese are at “higher risk for severe illness” from COVID-19.

Obesity, scientists know, is a diet-driven condition that contributes to many other serious health problems. Being overweight is strongly linked to the development of type 2 diabetes, for instance. Thus, it is not surprising that the CDC has found, along with the 48 percent of the COVID-19 victims who are obese, 28 percent of those hospitalized with the virus have diabetes.

2 https://www.ehn.org/obesity-coronavirus-2645861896.html
According to CRUK statistics, thousands of people, old and young, are receiving chemotherapy or radiotherapy for hundreds of cancers and will be susceptible to infection with COVID-19

It’s not just the old who are susceptible to infection with coronavirus. There are thousands of people old and young are receiving chemotherapy or radiotherapy for cancers that are probably the result of exposure to chemical pesticides. The people of Britain are sick as a result of immune deficiency caused by Roundup overuse. Weedkiller is in our food. Roundup based-herbicides are sprayed on our streets, our parks, they are in our rivers, in the air and they come down in rain. This exposure to chemical pesticides applies to NHS staff, our emergency services, the army and the police. Doctors brought in out of retirement will be similarly affected. Not only that, but the UK Government says the UK is prepared for an epidemic, but only a fraction of doctors polled said the NHS is ready.

Gates Foundation Criticized for Increasing Monsanto Investment: 27/08/2010

The charity of billionaire Microsoft founder Bill Gates and his wife Melinda is under criticism following the disclosure it’s substantially increased its holdings in the agribusiness giant Monsanto to over $23 million. Critics say the investment in Monsanto contradicts the Bill and Melinda Gates Foundation’s stated commitment to helping farmers and sustainable development in Africa. In 2007, the Gates Foundation said it would review its holdings after a lengthy exposé in the Los Angeles Times revealed it had invested nearly $9 billion in companies whose practices run counter to the foundation’s charitable goals.

Polly Jones of Global Justice organisation in 2016 published an article about Bill Gates: Gated Development: Is Bill Gates always a force for good?

BMGF funds many organisations to support vaccines and not mention pesticides

Gates funds BBC coverage of global health and development issues, both through its BBC Media Action organization 2017/2018 2.2 million dollars and the BBC itself. It was given $1,485,909 in November 2016: Purpose: to increase awareness of “home-grown” innovation in southern Asia and Africa and seek to understand what impact it can have on economic development, health, education and equality.

Gates funds world health coverage on ABC News. When the NewsHour with Jim Lehrer was given a $3.5 million Gates foundation grant to set up a special unit to report on global health issues, NewsHour communications chief Rob Flynn was asked about the potential conflict of interest that such a unit would have in reporting on issues that the Gates Foundation is itself involved in. “In some regards I guess you might say that there are not a heck of a lot of things you could touch in global health these days that would not have some kind of Gates tentacle,” Flynn responded.


Gates funds the Our World in Data website that is tracking the latest statistics and research on the coronavirus pandemic. The links have been carefully removed by the Guardian so we have no idea of the amounts of money the Guardian is being given.
BGMF funds the BBC to support the government. The BBC persists in quoting the numbers dead from COVID-19 (e.g. as 32,692 12 May) without saying that it excludes deaths outside hospital.

Funding of Imperial College and the Institute for Health Metrics and Evaluation

The work of two research groups was crucial in shaping the decision of the UK and US governments to implement wide-ranging lockdowns, and, in turn, governments around the world. The first group, the Imperial College COVID-19 Research Team, issued a report on March 16th that predicted up to 500,000 deaths in the UK and 2.2 million deaths in the US unless strict government measures were put in place. This year alone, the Gates Foundation has already given $79 million to Imperial College. The second group, the Institute for Health Metrics and Evaluation in Bill Gates’ home state of Washington, helped provide data that corroborated the White House’s initial estimates of the virus’ effects, estimates that have been repeatedly downgraded as the situation has progressed. In 2017 the BMGF announced a $279 million investment into the IHME to expand its work collecting health data and creating models.


Funding Bill & Melinda Gates Foundation.

The deaths over these three periods from Communicable, Maternal, Neonatal and Nutritional diseases (CMNN) comprises 18.6% (and have decreased by 22.2 %) and the Non-Communicable Diseases (NCDs) have increased to 73.4%.

Statistically significant increases between 2007 and 2017 in cancers and many other diseases

Amongst the many Tables, Graphs and colourful diagrams in the dense 53-page document, there appears to be statistically significant increases in deaths between 2007 and 2017 in cancers of the lip and oropharynx, oesophagus, stomach, colon and rectum, liver, gall-bladder and bile duct, pancreas, larynx, tracheobronchial and lung cancer, skin (malignant melanoma and squamous cell), breast, cervix, uterus, ovary, prostate, testicular, kidney, bladder, thyroid, mesothelioma, Non-Hodgkin’s Lymphoma, all leukaemias, myelodysplasias, Alzheimer’s Disease, Parkinson’s disease, Multiple Sclerosis, Motor Neurone Disease, Stroke, eating disorders, Diabetes Mellitus Type 1 and Type 2, Chronic Kidney Disease, Congenital Malformations, Self-harming and Obesity. I cannot find any comments about these, any explanations or discussion about the possible causes.

Diseases of obesity

“Our results show that a large number of deaths are known to be caused by high body-mass index, including cardiovascular diseases, neoplasms, dementia, asthma, hepato-biliary diseases, as well as diabetes and kidney diseases. The prevalence of obesity continues to rise in almost every country in the world, with more than 1 million deaths estimated as being due to type 2 diabetes, half a million deaths due to diabetes-related chronic kidney disease, and 180000 deaths due to NASH-related liver cancer and cirrhosis in this analysis. Non-Alcoholic Steato-Hepatosis (NASH) in the US (or NAFLD in Europe), is most often due to chronic insulin resistance secondary to obesity and might be present among 10–35% of the global adult population.”

Leading causes of death: 1990
1 Neonatal disorders
2 Lower respiratory infections
3 Diarrhoeal diseases
4 Ischaemic heart disease
5 Stroke

Leading causes of death: 2007
1 Neonatal disorders
2 Lower respiratory infections
3 Ischaemic heart disease
4 Diarrhoeal diseases
5 HIV/AIDS

Leading causes of death: 2017
1 Ischaemic heart disease
2 Neonatal disorders
3 Stroke
4 Lower respiratory infections
5 Diarrhoeal diseases

11 https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2932203-7
Diabetes has moved steadily up from number 28 in 1990 to 17 in 2007 to 15 in 2017. Alzheimer’s Disease has moved steadily up from number 33 in 1990 to 23 in 2007 to 17 in 2017. Liver cancer has moved steadily up from number 30 in 1990 to 24 in 2007 to 19 in 2017. Ischaemic heart disease has moved steadily up from number 4 in 1990 to 3 in 2007 to 1 in 2017. Lung cancer (often in non-smokers) has moved steadily up from number 17 in 1990 to 14 in 2007 to 12 in 2017.

Global Burden of Diseases 1990 - 2017
Figure 7 Leading Causes of Death 1990, 2007 and 2017 Progression shown of significant diseases Page 1767

The Institute for Health Metric and Evaluation (IHME) prediction for the UK
The Institute for Health Metric and Evaluation (IHME) predicts that in the UK there will be 66,000 deaths from COVID-19 by August and a peak of 3,000 a day. How do they know? Dr Christopher Murray heads both the IHME and the Global Burden of Disease studies.

Global burden of disease study 2010 shows declines in the health of the UK
Between 1990 and 2010, Britain has slipped down the scale of health compared with other wealthy nations.

“The performance of the UK in terms of premature mortality is persistently and significantly below the mean of EU15+ and requires additional concerted action... premature mortality from several major causes such as cardiovascular disease and cancers...In terms of premature mortality worsening ranks are most notable for men and women aged 20-54 years. Increases in Alzheimer’s disease, breast cancer, oesophageal cancer, congenital anomalies “and a growing burden of disability, particularly from mental disorders” are all acknowledged.

Cancer deaths worldwide: in 2011, 7 million deaths; predicted to rise to 12 million by 2030.
The Cancer Research UK figures for cancers are similar to the figures for the Global Burden of Disease 1990 to 2017. But the GBD figures are concealed in 53 pages, small type-face, multi-author, abbreviations and jargon, a profusion of words and multicoloured complicated diagrams. The declarations of financial interest reveal that financial contributions are provided by a plethora of pharmaceutical and agrochemical corporations. The Funding was provided by the Bill and Melinda Gates Foundation. Have Dr Gregory Roth and Dr Christopher Murray written this paper in order to protect Bayer and to please the BMGF? In 2017 the BMGF announced a $279 million investment into the IHME to expand its work collecting health data and creating models.

Why did the UK media hide the fact that Sir Patrick Vallance, the Chief Scientific Advisor appointed by the British Government in March 2018, worked for GlaxoSmithKline for 12 years?
When he had been a doctor he had specialised in vascular physiology, not public health. His advice was to let herd immunity kick in. He insinuated the price of deaths in the vulnerable would be acceptable. Sir Patrick Vallance gave evidence to the Parliamentary Science and Technology Committee about the COVID-19 pandemic. He never mentioned that he had been working for GSK for 12 years and wasn’t trained in Public Health. At 12.42 the Chairman asked him whether or not the Scientific Advisory Committee for Emergencies (SAGE) had adequate ‘clinical representation’. He replied that he, Prof Chris Whitty and Sir Simon Stevens, Head of the NHS in England, were all doctors! Sir Patrick said when appearing with the Prime Minister, ’The UK is home to incredible scientists and researchers who are all at the forefront of their field, and all united in their aim; protecting people’s lives from coronavirus. The announcement made today reflects the vital work...

13 https://www.parliamentlive.tv/Event/Index/2b1c71d4-bdf4-44f1-98fe-1563e67060ee
being undertaken by our scientists to help develop vaccines and treatments. This research could herald important breakthroughs that will put the NHS in a stronger position to respond to the outbreak.'

Sir Patrick wrote an article in the Guardian\textsuperscript{14} in which he promoted his own company. "The UK is home to world-leading scientists, researchers and companies who are at the forefront of vaccine development and manufacturing. The progress in vaccine developments from our academic institutions here in the UK is impressive. And as the announcement from GSK and Sanofi shows, companies are collaborating to work together to tackle this threat."

Boris Johnson added ‘People will die’ and he nearly did

Katharine Viner Editor-in-Chief of the Guardian had been paid by the Bill and Melinda Gates and the Rockefeller Foundations to promote vaccines and not to mention the weedkiller in our food.

Weed killer found in samples of UK cereals for children

In August 2018, samples of four oat-based UK cereals were sent to a Health Research Institute in the US, in response to an article in the Guardian about weedkiller found in US cereals for children.

Dr Fagan the Director said: “These results are consistently concerning. The levels consumed in a single daily helping of any one of these cereals, even the one with the lowest level of contamination, is sufficient to put the person’s glyphosate levels above the levels that cause fatty liver disease in rats (and likely in people).

<table>
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<th>Type of breakfast cereal marketed for children</th>
<th>Glyphosate level ng/g</th>
<th>AMPA ng/g</th>
<th>Effective glyphosate level ng/g</th>
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<tr>
<td>Kelloggs No added sugar granola with Apricot &amp; pumpkin seeds</td>
<td>499.90</td>
<td>ND</td>
<td>499.90</td>
</tr>
<tr>
<td>Quaker/Oat So simple/Original Microwaveable Oats</td>
<td>464.23</td>
<td>24.04</td>
<td>500.28</td>
</tr>
<tr>
<td>Weetibix Oatibix 100% wholegrain oats</td>
<td>318.85</td>
<td>16.96</td>
<td>344.28</td>
</tr>
<tr>
<td>Nestle Multigrain Cheerios Whole Grain Oat Flour 29.6% Whole Grain Wheat 29.6% Whole Grain Barley Flour 17.9% Whole Grain Corn Flour 2.1% Whole Grain Rice Flour 2.1%.</td>
<td>137.29</td>
<td>ND</td>
<td>137.29</td>
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A letter reporting these levels in UK children’s cereals was rejected by the Letters’ Editor of the Guardian which is supported by the Bill and Melinda Gates Foundation and the Rockefeller Foundation. In line with the BMGF, the Guardian also supports vaccinations. However, the Health Editor in the Daily Mail wrote a long article about the shocking results of weedkiller in food.\textsuperscript{15}

Some UK farmers have been spraying Roundup on crops pre-harvest to desiccate (dry) them at the suggestion of a Monsanto scientist since 1980.\textsuperscript{16} This procedure was endorsed by ADAS.\textsuperscript{17} The use of Roundup has gone from 226,762 kg in 1990 to 2,240,408 kg in 2016, a 10-fold increase in 16 years because of weed resistance.

\textsuperscript{14} https://www.theguardian.com/commentisfree/2020/apr/19/coronavirus-vaccine-covid-19-nhs
\textsuperscript{15} https://www.dailymail.co.uk/health/article-6315209/Revealed-UK-cereals-contain-potentially-harmful-amounts-WEEDKILLER.html
\textsuperscript{16} http://www.hgca.com/media/185527/is02-pre-harvest-glyphosate-application-to-wheat-and-barley.pdf
\textsuperscript{17} ADAS is now the UK’s largest independent provider of agricultural and environmental consultancy, rural development services and policy advice; formerly a branch of Ministry of Agriculture, Fisheries & Food. (MAFF)
By Robert F. Kennedy Jr., Chairman, Children’s Health Defense

Gates’ Globalist Vaccine Agenda: A Win-Win for Pharma and Mandatory Vaccination

Vaccines, for Bill Gates, are a strategic philanthropy that feed his many vaccine-related businesses (including Microsoft’s ambition to control a global vaccination ID enterprise) and give him dictatorial control of global health policy.

Gates’ obsession with vaccines seems to be fueled by a conviction to save the world with technology. Promising his share of $450 million of $1.2 billion to eradicate Polio, Gates took control of India’s National Technical Advisory Group on Immunization (NTAGI) which mandated up to 50 doses (Table 1) of polio vaccines through overlapping immunization programs to children before the age of five. Indian doctors blame the Gates campaign for a devastating non-polio acute flaccid paralysis (NPAFP) epidemic that paralyzed 490,000 children beyond expected rates between 2000 and 2017. In 2017, the Indian government dialled back Gates’ vaccine regimen and asked Gates and his vaccine policies to leave India. NPAFP rates dropped precipitously.

The most frightening [polio] epidemics in Congo, Afghanistan, and the Philippines, are all linked to vaccines.

In 2017, the World Health Organization (WHO) reluctantly admitted that the global explosion in polio is predominantly vaccine strain. The most frightening epidemics in Congo, Afghanistan, and the Philippines, are all linked to vaccines. In fact, by 2018, 70% of global polio cases were vaccine strain.

In 2014, the Gates Foundation funded tests of experimental HPV vaccines, developed by Glaxo Smith Kline (GSK) and Merck, on 23,000 young girls in remote Indian provinces. Approximately 1,200 suffered severe side effects, including autoimmune and fertility disorders. Seven died. Indian government investigations charged that Gates-funded researchers committed pervasive ethical violations: pressuring vulnerable village girls into the trial, bullying parents, forging consent forms, and refusing medical care to the injured girls. The case is now in the country’s Supreme Court.

South African newspapers complained, ‘We are guinea pigs for the drug makers.’

In 2010, the Gates Foundation funded a phase 3 trial of GSK’s experimental malaria vaccine, killing 151 African infants and causing serious adverse effects including paralysis, seizure, and febrile convulsions to 1,048 of the 5,949 children.


In 2010, Gates committed $10 billion to the WHO saying, “We must make this the decade of vaccines.” A month later, Gates said in a Ted Talk that new vaccines “could reduce population”. In 2014, Kenya’s Catholic Doctors Association accused the WHO of chemically sterilizing millions of unwilling Kenyan women with a “tetanus” vaccine campaign. Independent labs found a sterility formula in every vaccine tested. After denying the charges, WHO finally admitted it had been developing the sterility vaccines for over a decade. Similar accusations came from Tanzania, Nicaragua, Mexico, and the Philippines.

A 2017 study (Morgenson et. al. 2017) showed that WHO’s popular DTP vaccine is killing more African children than the diseases it prevents. DTP-vaccinated girls suffered 10x the death rate of children who had not yet received the vaccine. WHO has refused to recall the lethal vaccine which it forces upon tens of millions of African children annually.

[Global public health officials] say he has diverted agency resources to serve his personal philosophy that good health only comes in a syringe.

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Global public health advocates around the world accuse Gates of steering WHO’s agenda away from the projects that are proven to curb infectious diseases: clean water, hygiene, nutrition, and economic development. The Gates Foundation only spends about $650 million of its $5 billion dollar budget on these areas. They say he has diverted agency resources to serve his personal philosophy that good health only comes in a syringe.

In addition to using his philanthropy to control WHO, UNICEF, GAVI, and PATH, Gates funds a private pharmaceutical company that manufactures vaccines, and additionally is donating $50 million to 12 pharmaceutical companies to speed up development of a coronavirus vaccine. In his recent media appearances, Gates appears confident that the Covid-19 crisis will now give him the opportunity to force his dictatorial vaccine programs on American children.

The Bill and Melinda Gates Foundation paid a PR firm to lobby the UN

Jonathan Latham of Independent Science News reports: “The Bill and Melinda Gates Foundation this year paid a PR firm called Emerging Ag $1.6 million to recruit a covert coalition of academics to manipulate a UN decision-making process over gene drives, according to emails obtained through Freedom of Information requests. Gene drives are a highly controversial new genetic extinction technology. They have been proposed as potentially able to eradicate malarial mosquitoes, agricultural pests, invasive species, as well as having potential military uses. Emerging Ag calls itself “a boutique international consulting firm providing communications and public affairs services.” Its president and founder is Robynne Anderson, a former international communications director of CropLife, the global lobby group for the biotechnology, seed, and pesticide industries.”

Coalition for Epidemic Preparedness Innovations (CEPI)

It was conceived in 2015 and formally launched in 2017 at the World Economic Forum (WEF) in Davos, Switzerland. It was co-founded and co-funded with US$460 million from the Bill and Melinda Gates Foundation, The Wellcome Trust, and a consortium of nations, being Norway, Japan, Germany; to which the European Union (2019) and Britain (2020) subsequently joined. Between 2014 and 2019 the BMGF donated more than $22 million to The Wellcome Trust.

Bill Gates plans to issue a passport to travel to prove that people have received the vaccine

The Vaccine Agenda

A Liverpool study of hospital patients reported in the Guardian on 30 April 2020 states that one-third are dying. Prof Semple the first author of the study said: “The reason the government is keen to keep (sic) people to stay at home until the outbreak is quietening down is because this is an incredibly dangerous disease.”

This is a multi-author (23 authors) study that hasn’t been peer-reviewed. Did some authors have conflicts of interest? Prof Peter Horby leads the team at Oxford University that is already testing a vaccine on volunteers. Jonathan Van-Tam is Deputy Chief Medical Officer. According to his CV, he became a Senior Lecturer at the University of Nottingham in 1997, before joining the pharmaceutical industry as an Associate Director at SmithKline Beecham, then Head of Medical Affairs at Roche, and finally UK Medical Director at Aventis Pasteur MSD. He moved to the UK Health Protection Agency in 2004. He appears at the Government Coronavirus briefing when he urges the public to remain locked down. STAY AT HOME. SAVE LIVES. SAVE THE NHS.

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20 [https://www.gatesfoundation.org/How-We-Work/%20Quick-Links/Grants-Database?q=k=wellcome](https://www.gatesfoundation.org/How-We-Work/%20Quick-Links/Grants-Database?q=k=wellcome)
21 [https://www.youtube.com/watch?v=OGsqtF0MhI1&feature=emb_logo](https://www.youtube.com/watch?v=OGsqtF0MhI1&feature=emb_logo)
23 [https://www.medrxiv.org/content/10.1101/2020.04.23.20076042v1.full.pdf](https://www.medrxiv.org/content/10.1101/2020.04.23.20076042v1.full.pdf)
Prof Sarah Gilbert who is doing the study that is being led by Prof Peter Horby of Oxford University, was interviewed by Andrew Marr last week:

“We will also be looking to see if the vaccine works to protect people and stops them getting infected with the virus. The way we do assess this is by giving half the people in the trial the coronavirus vaccine and half of them another vaccine – a vaccine that’s licensed to protect against meningitis. People don’t know which vaccine they’re having, and over time as people become infected or have symptoms of coronavirus, they’ll come to us to get tested.”

Even in the 1970s the Agricultural Industry was given massive power by the British Government

Robert van den Bosch, writing in 1978 in *The Pesticide Conspiracy*:

“If one considers how dangerous these chemicals are, one would suppose that it would be Government policy to minimize their use by every possible means. However, the Royal Commission on Environmental Pollution notes, ‘there is... no such policy in the UK, nor does the possible need for it appear to have been considered, notwithstanding the great increases in the use of these chemicals.’

The Agrochemical Industry, on the contrary, seems to be under the impression it is Government policy to encourage the maximum use of pesticides. Thus, according to the Agrochemical industry, of 367,000 acres of potatoes grown in this country in 1976, 310,000 acres are treated with herbicides, 114,000 acres with granular insecticides and nematocides, 218,000 acres with foliar insecticides and 265,000 acres with fungicides. In this way one acre of potatoes, the industry boasts, can be treated from 2-11 times with different pesticides.” Van den Bosch also condemns the UK for aerial spraying. “What is particularly shameful in this country is the prevalence of aerial spraying. One million acres of agricultural land are sprayed each year, which involves 34,000 flights. Controls on this practice are practically non-existent...nor as the Royal Commission points out, does there appear to be any controls on the type of spraying equipment.” Britain still uses aerial spraying as derogation from the EU recommendations. The Royal Commission on Environmental Pollution was abolished on 1 April 2011, as part of the Coalition Government’s spending cuts. It had been created under Royal Warrant in 1970 to advise the Queen, Government, Parliament and the public on environmental issues.

**UK’s Science Media Centre (SMC), set up in 2002, lambasted for pushing corporate science**

The SMC sponsors include AstraZeneca, BP, Coca-Cola, L’Oreal, Monsanto, Syngenta and Nature Publishing Group. The Centre provides a rapid ‘expert’ opinion for journalists. But the Director admits that it was set up in the wake of Dr Árpád Pusztai publishing his paper which showed that rats fed on GM potatoes had stunted growth and a repressed immune system. The ‘experts’ are proponents of GMOs often having major conflicts of interest. The UK SMC allows corporations to influence what journalists write and hence control the information given to the British public.

The meeting of global science writers in Bath in 2014 concluded: “Journalists who uncritically report on SMC briefings and quotes sent by the centre are being taken for a ride by a lobby organisation instead of a neutral science information provider.”

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24 https://covid19vaccinetrial.co.uk/interview-sarah-gilbert
26 Industry’s Statistics: British Agrochemical Association London 1976
27 https://www.scidev.net/global/journalism/feature/uk-s-science-media-centre-lambasted-for-pushing-corporate-science.html
When glyphosate was reassessed in 2004, Professor Alan Boobis OBE, from Imperial College, was Chairman of the UN’s JMPR meeting on pesticide residues. Imperial College is funded by BMGF. Mean tissue concentration of radioactivity (ppm) at 168 h in rats given ^14^C-labelled glyphosate as single or repeated doses. Glyphosate was present in whole blood, liver, brain, kidney, spleen, lung, heart, testes/ovary, stomach, small intestine, colon, bone, bone marrow, abdominal muscles, shoulder muscles. So why did Dan Goldstein, Senior Science Fellow and Lead, Medical Sciences and Outreach, Monsanto on Friday, 12/20/2013 3:16 pm: claim: “If ingested, glyphosate is excreted rapidly, does not accumulate in body fat or tissues, and does not undergo metabolism in humans. Rather, it is excreted unchanged in the urine?”


**EU Directive Advice:** Aerial spraying of pesticides has the potential to cause significant adverse impacts on human health and the environment, in particular from spray drift. Therefore, aerial spraying should generally be prohibited with derogations possible where it represents clear advantages in terms of reduced impacts on human health and the environment in comparison with other spraying methods, or where there are no viable alternatives, provided that the best available technology to reduce drift is used.

**UK Government Response:** We do not consider that responsible application of pesticides by aerial spraying poses an unacceptable risk to human health and the environment, and consequently we will use the derogation. We believe that the existing legislation control regime provides a basis for meeting the Directive and this will be adapted to ensure the continuation of properly regulated aerial applications through a consent-based approach.

**David Cameron appointed Michael Pragnell, founder of Syngenta on to the Board of Cancer Research UK in 2010; he became Chairman in 2011**

Michael Pragnell former Chairman of Cancer Research UK (2010-2017), founder of Syngenta and former Chairman of CropLife International was awarded a CBE in 2017 for services to cancer research. CropLife International was founded in 2001. As of 2015 CropLife International’s member list includes the following 8 companies: BASF, Bayer CropScience, Dow AgroSciences, DuPont, FMC Corp., Monsanto, Sumitomo and Syngenta. Many of these make their own formulated glyphosate. Executives from Cancer Research UK, Professor Dame Sally Davies (the then Chief Medical Officer for England) and Public Health England linked cancer to alcohol, obesity and smoking. They all blamed the people for 'lifestyle choices.' Seven cancers were linked to alcohol and 13 cancers were linked to obesity. Where is the scientific evidence for this?

**The Francis Crick Institute with its ‘world class resources’ is failing to improve people’s lives with its treatments, but is definitely strengthening the economy of the pesticides industry and the pharmaceutical industry**

**Report:** “The Francis Crick Institute is a biomedical discovery institute dedicated to understanding the fundamental biology underlying health and disease. Its work is helping to understand why disease develops and to translate discoveries into new ways to prevent, diagnose and treat illnesses such as cancer, heart disease, stroke, infections, and neurodegenerative diseases.”

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28 https://apps.who.int/iris/bitstream/handle/10665/43624/9241665203_eng.pdf;jsessionid=80A4D3975D658B30F18E902E040DF27C?sequence=1
31 https://www.crick.ac.uk/about-us/
An independent organisation, its founding partners are the Medical Research Council (MRC), Cancer Research UK, Wellcome, UCL (University College London), Imperial College London and King’s College London. These institutions are all funded by the Bill and Melinda Gates Foundation.

Multiomics reveal non-alcoholic fatty liver disease in rats following chronic exposure to an ultra-low dose of Roundup herbicide.32

Overall, metabolome and proteome disturbances showed a substantial overlap with biomarkers of non-alcoholic fatty liver disease and its progression to steatohepatosis and thus confirm liver functional dysfunction resulting from chronic ultra-low dose Glyphosate-Based Herbicide (GBH) exposure. The study is the first ever to show a causative link between consumption of Roundup at a real-world environmentally relevant dose and a serious disease. NAFLD currently affects 25% of the US population and similar numbers of Europeans. Risk factors include being overweight or obese, having diabetes, or having high cholesterol or high triglycerides (a constituent of body fat) in the blood. However, some people develop Non-Alcoholic Fatty Liver Disease (NAFLD) even if they do not have any of these known risk factors. Liver cancer has gone from number 30 to number 24 to number 19 in the causes of deaths in the Global Burden of Disease Study 2017.

Neurotransmitter changes in the brain from exposure to glyphosate-based herbicides

Many papers come from Latin American countries where they grow almost exclusively GM Roundup Ready Crops that Monsanto forced on them in 1996. Here are three papers. However, the European Glyphosate Task Force excluded scientific papers from South America in their re-assessment of glyphosate.

Behavioral impairments following repeated intranasal glyphosate-based herbicide administration in mice. 33

*Taken together, our findings demonstrate that intranasal (IN) exposure to commercial Gly-BH produces alterations in locomotor activity, anxiety and memory in adult mice. These observations could be a consequence of alterations in neurotransmission systems comprising the GABAergic, dopaminergic, serotonergic and/or cholinergic systems.*

In this research paper there are references to many papers from around the world that confirm the glyphosate-based herbicides are damaging to the development of the foetal brain and that repeated exposure is toxic to the adult human brain and may result in alterations in locomotor activity, feelings of anxiety and memory impairment.


Highlights:

- Glyphosate oral exposure caused neurotoxicity in rats.
- Brain regions were susceptible to changes in CNS monoamine levels.
- Glyphosate reduced 5-HT, DA, NE levels in a brain regional- and dose-related manner.
- Glyphosate altered the serotonergic, dopaminergic and noradrenergic systems.

Mechanisms underlying the neurotoxicity induced by glyphosate-based herbicide in immature rat hippocampus: Involvement of glutamate excitotoxicity. 35

The effects on neonicotinoid insecticides on the human brain

Many independent scientists have demonstrated that the neonicotinoid insecticides have effects on the mammalian brain, particularly that of the foetus. In 2000, Tomiwaza et al. showed that neonicotinoids acted on mammalian nicotinic acetylcholine receptors as well as those of insects, but

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32 http://www.nature.com/articles/srep39328
34 https://www.sciencedirect.com/science/article/pii/S0013935117316730
considered that the selective nature of its binding (i.e. less affinity than in insects) made it safe for human exposure.\textsuperscript{36} However, they are long-acting and are now widespread in the environment. Clothianidin, for example, has a half-life in soil of up to 1386 days so it accumulates in the soil, yet farmers apply neonicotinoids blindly the following year. Li \textit{et al.} obtained preparations of human neonicotinoid acetylcholine receptors and found that both chemicals had effects on human receptors, but imidacloprid more so than clothianidin.\textsuperscript{37} Tennekes and Sánchez-Bayo demonstrated that chemicals binding irreversibly to specific receptors (neonicotinoids, genotoxic carcinogens and some metals) will produce toxic effects in a time-dependent manner, no matter how low the level of exposure.\textsuperscript{38} Neonicotinoid insecticides cause damage to the central nervous system of insects that is virtually irreversible and cumulative. There is apparently no safe level of exposure; even minute quantities can have severe effects in the long term. During pregnancy, when the foetal brain is the size of an insect, exposure to neonicotinoids may cause similar neurological defects.

**Alzheimer’s Disease and Dementia**

Dementia in the UK: predicted 1 million people with dementia in 2025 and 2 million by 2050. Many people talk about a ‘dementia time bomb’ that the state cannot cope with. This is misleading. A steady, rather than dramatic, growth is expected over the next 25 years. In 2013, there were also 42,325 people with early-onset dementia (onset before the age of 65 years) in the UK.

Each year there are steady increases in the numbers of new cancers in the UK and increases in deaths from the same cancers, with no treatments making any difference to the numbers. In the UK there were 13,605 new cases of Non-Hodgkin Lymphoma in 2015 (and 4,920 deaths in 2016)\textsuperscript{39}: there were \textit{41,804 new cases of bowel cancer} in 2015 (and 16,384 deaths in 2016); \textit{12,547 new cases of kidney cancer} in 2015 (and 4,619 deaths in 2016); \textit{5,736 new cases of liver cancer} in 2015 (5,417 deaths in 2016); \textit{15,906 new cases of melanoma} in 2015 (2,285 deaths in 2016); \textit{3,528 new cases of thyroid cancer} in 2015 (382 deaths in 2016); \textit{10,171 new cases of bladder cancer} in 2015 (5,383 deaths in 2016); \textit{8,984 new cases of uterine cancer} in 2015 (2,360 deaths in 2016); \textit{7,270 cases of ovarian cancer} in 2015 (4,227 deaths in 2016); \textit{9,900 new cases of leukaemia} in 2015 (4,712 deaths in 2016); \textit{55,122 new cases of invasive breast cancer} in 2015 (11,563 deaths in 2016); \textit{47,151 new cases of prostate cancer} in 2015 (11,631 deaths in 2016); \textit{9,211 new cases of oesophageal cancer} in 2015 (8,004 deaths in 2016); and \textit{5,540 new cases of myeloma} in 2015 (3,079 deaths in 2016); \textit{2,288 new cases of testicular cancer} in 2015 (57 deaths in 2016); \textit{9,921 new cases of pancreatic cancer} in 2015 (9,263 deaths in 2016); \textit{11,432 new cases of brain cancer} in 2015 (5,250 deaths in 2016); \textit{46,388 new cases of lung cancer} in 2015 (and 35,620 deaths in 2016). In the US in 2014 there were 24,050 new cases of myeloma.

**Cancers that have been linked to Roundup**

Non-Hodgkin’s Lymphoma, Colon Cancer, Liver Cancer, Pancreatic Cancer, Kidney Cancer, Melanoma, Thyroid Cancer, Bone Cancer, Breast Cancer.\textsuperscript{40}

\textsuperscript{36} \url{http://www.ncbi.nlm.nih.gov/pubmed/11312774}
\textsuperscript{37} \url{http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3668458/}
\textsuperscript{38} \url{https://www.researchgate.net/publication/236343937_Time-dependent_toxicity_of_neonicotinoids_and_other_toxicants_Implications_for_a_new_approach_to_risk_assessment}
\textsuperscript{39} \url{https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/non-hodgkin-lymphoma}
\textsuperscript{40} \url{https://www.responsibletechnology.org/gmo-dangers/roundup-weed-killer-linked-to-cancer/}
The incidence of childhood cancers is increasing relentlessly in the UK. In Britain, childhood cancer incidence rates increased by 38% between 1966-2000. Since the early 1990s the incidence rate for children with childhood cancer has increased 15%; in the last decade there has been increase of 10%. This means that around one child in 500 will develop some form of cancer by the age of 14 years. Each year 4,500 children and young people are diagnosed with cancer.

Teenage and young adults (TYA) between 15-24-year-olds. 2,200 are diagnosed with cancer each year. Cancers in TYA are more common than in children. Lymphoma is the most common cancer in this age group, accounting for more than 20% of cases. Next most common is carcinoma (of the thyroid, cervix, ovary, bowel or breast). Germ cell tumours become much more common, with the majority of cases being testicular.

Bone tumours are more than twice as common in TYA as in childhood. Cancer is the most common cause of death from disease in the TYA age group, accounting for around 310 deaths per year in the UK. Brain tumours are responsible for the largest proportion of these deaths (19%), closely followed by the leukaemias, which account for around 18% of deaths. Bone tumours and lymphomas also account for a large proportion of deaths, at 15% and 12% respectively.

In 1966, in a busy practice in Hull, Yorkshire, GPs would expect to have only 12 new cancers a year. What has changed? Exposure to environmental toxins – such as pesticides.

Pesticides are not the concern of the Department of Health

The Department of Health’s School Fruit and Vegetable Scheme (SFVS) has residues of 123 different pesticides analysed by PAN-UK. Pesticide Action Network UK’s analysis of the last 12 years of residue data published by the Expert Committee on Pesticide Residues in Food (PRiF) shows that there are unacceptable levels of pesticides present in the food provided through the Department of Health’s School Fruit and Vegetable Scheme (SFVS). Residues of 123 different pesticides were found, some of which are linked to serious health problems such as cancer and disruption of the hormone system. In many cases, multiple residues were found on the produce. This is another area of serious concern as the scientific community has little understanding about the complex interaction of different chemicals in what is termed the ‘cocktail’ effect. We have also found that the levels of residues contained on SFVS produce are higher than those in produce tested under the national residue testing scheme (mainstream produce found on supermarket shelves). When PAN-UK sent its 2017 findings to the Department of Health, it was told that pesticides are not the concern of the DoH.

Between May 2010 and the end of 2013, the Department of Health alone had 130 meetings with representatives of industry

Documents released under a freedom of information request showed that between the coalition taking power in May 2010 and the end of 2013 the Department of Health alone had 130 meetings with representatives of industry. The extensive investigation shows “beyond doubt that commercial interests are currently in control of key decisions about the public’s health.”

The gut microbiome; the collective genome of organisms inhabiting our body. Obesity is associated with low bacterial richness in the gut.

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42 https://www.childrenwithcancer.org.uk/childhood-cancer-info/teenage-young-adult-cancers/
43 Personal experience.
44 http://www.pan-uk.org/food-for-thought/
45 igornall@mac.com BMJ 2014; 348: f7646
We can only absorb nutrients via trillions of bacteria in our gut, the gut microbiome. This is the term for the collective genome of organisms inhabiting our bodies. Glyphosate disrupts the shikimate pathway within these gut bacteria, without which we cannot survive. Glyphosate is a strong chelator of essential minerals, such as cobalt, zinc, manganese, calcium, molybdenum and sulphate. In addition, it kills off beneficial gut bacteria and allows toxic bacteria such as *Clostridium difficile* to flourish. Two key problems caused by glyphosate residues in our diet are nutritional deficiencies, especially minerals and essential amino-acids, and systemic toxicity.46

Richness of human gut microbiome correlates with metabolic markers: we are facing a global metabolic health crisis provoked by an obesity epidemic

“We are facing a global metabolic health crisis provoked by an obesity epidemic.” In a multi-author study of obese and non-obese individuals, those with “low bacterial richness in the gut (23% of the population) are characterized by more marked overall adiposity, insulin resistance and dyslipidaemia and a more pronounced inflammatory phenotype when compared with those with high bacterial richness. Low richness of gut microbiota has been reported in patients with inflammatory bowel disorder. Also, notable diversity differences were observed between the urban US population and rural populations from two developing countries.”

The microbiome of uncontacted Amerindians has the highest diversity of bacteria48

“We characterize the fecal, oral, and skin bacterial microbiome and resistome of members of an isolated Yanomami Amerindian village with no documented previous contact with Western people. These Yanomami harbor a microbiome with the highest diversity of bacteria and genetic functions ever reported in a human group.”

Regulation of prefrontal cortex (PFC) myelination by the microbiota49

Extracts from Abstract The prefrontal cortex (PFC) is a key region implicated in a range of neuropsychiatric disorders such as depression, schizophrenia and autism. In parallel, the role of the gut microbiota in contributing to these disorders is emerging. Germ-free (GF) animals, microbiota-deficient throughout life, have been instrumental in elucidating the role of the microbiota in many aspects of physiology, especially the role of the microbiota in anxiety-related behaviours, impaired social cognition and stress responsivity. Here we aim to further elucidate the mechanisms of the microbial influence by investigating changes in the homeostatic regulation of neuronal transcription of GF mice within the PFC using a genome-wide transcriptome profiling approach. Our results reveal a marked, concerted upregulation of genes linked to myelination and myelin plasticity. This coincided with upregulation of neural activity-induced pathways, potentially driving myelin plasticity. Subsequent investigation at the ultrastructural level demonstrated the presence of hypermyelinated axons within the PFC of GF mice. Notably, these changes in myelin and activity-related gene expression could be reversed by colonization with a conventional microbiota following weaning. In summary, we believe we demonstrate for the first time that the microbiome is necessary for appropriate and dynamic regulation of myelin-related genes with clear implications for cortical myelination at an ultrastructural level. The microbiota is therefore a potential therapeutic target for psychiatric disorders involving dynamic myelination in the PFC. They postulate the microbiome has relevance for both gastrointestinal and brain disorders, including autism spectrum disorders, Parkinson’s disease and even demyelinating disorders of the central nervous system.

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46 https://www.mdpi.com/1099-4300/15/4/1416
47 http://www.nature.com/nature/journal/v500/n7464/abs/nature12506.html
48 http://advances.sciencemag.org/content/1/3/e1500183.short
49 https://www.nature.com/articles/tp201642
Why is COVID-19 hitting the populations of Newport, Cardiff, Swansea and the Rhondda Valley so severely? The Westminster Government invited Monsanto to set up a factory in Newport

In 1949 after the Nuremberg Trials following WW2, Clement Atlee invited Monsanto to set up a factory in Newport, South Wales, as far from Westminster as possible, to manufacture toxic chemicals; vinyl chlorides, naphthalene, DDT, dioxins and PCBs. Westminster also cosied up to Bayer Crop Science, the former IG Farben, the private chemical company that collaborated with the Nazis and ran a factory and a concentration camp at Auschwitz, leading to an estimated 30,000 deaths of European Jews.

In 1971 Ted Heath agreed to ramp up production of PCBs at the Monsanto plant in Newport

In 1968 US documents showed that Monsanto tried to decide whether or not to come clean about the dangers of the chemicals. They stopped making polychlorinated biphenyls (PCBs) in Anniston US in 1971 because of scandals about PCBs on the health of the population and wildlife. However, the British government led by Ted Heath agreed to ramp up the production of PCBs at the Monsanto plant in Newport.

Alabama is more than 50 million square miles: Wales is 8,000 square miles.

Monsanto’s toxic chemicals illegally dumped in quarries in Wales: still leaking into groundwater

Toxic waste from the increased production was dumped at five other quarries in Wales and one in the north of England. The UK government, which knew of the dangers of PCBs in the environment in the 1960s, allowed their production in Wales until 1977. In 2003 when toxic effluent from the quarry starting leaking into people’s streams in Grosfaen just outside Cardiff, the Environment Agency - a government agency concerned with flooding and pollution – was hired to clean up the site in 2005. “Firstly, the Agency repeatedly failed to hold Monsanto accountable for its role in the pollution (a role that Monsanto denied from the outset). Secondly, the Agency consistently downplayed the dangers of the chemicals themselves, even claiming that they offered no “identifiable harm or immediate danger to human health” in their official report.”

According to engineering company WS Atkins, in a report prepared for the agency and the local authority in 2005 but never made public, the site contains at least 67 toxic chemicals. Seven PCBs have been identified, along with vinyl chlorides and naphthalene. The unlined quarry is still leaking, the report says. "Pollution of water has been occurring since the 1970s, the waste and groundwater has been shown to contain significant quantities of poisonous, noxious and polluting material, pollution of ... waters will continue to occur."

CONTAMINATION: The results of WWF-UK’s Bio-monitoring Survey November 2003

Executive summary

WWF visited 13 locations in England, Northern Ireland, Scotland and Wales in the summer of 2003 and took blood samples from 155 volunteers. Lancaster University analysed the samples for 78 chemicals: 12 organo-chlorine pesticides (including DDT and lindane), 45 PCB congeners and 21 polybrominated diphenyl ethers (PBDE) flame retardants, including those found in the commercially traded penta-, octa- and deca-BDEs.

WWF believes that this survey provides the first data on the concentrations of PCBs, organo-chlorine pesticides and PBDEs in the UK population’s blood serum. Further, these results form the most comprehensive and largest data-set of organo-halogen chemical concentrations in humans in the UK in the last 10 years at least. In addition, the survey is the first that tries to link findings of chemical contamination to people’s lifestyles.

50 https://www.theguardian.com/guardian/2007/feb/12/frontpagetopics.uknews
51 http://www.theecologist.org/The_Brofiscin_Monsanto_Files/777777/burying_the_truth_the_orginal_ecologist_investigation_into_monsanto_and_brofiscin Quarry.html
Every person tested is contaminated by a cocktail of known highly toxic chemicals which were banned from use in the UK during the 1970s and which continue to pose unknown health risks.

We found 70 (90 per cent) of the 78 chemicals we looked for in the survey. The highest number of chemicals found in any one person was 49 - nearly two thirds (63 per cent) of the chemicals looked for.

Every person is contaminated by chemicals from each group: organochlorine pesticides, PCBs and PBDEs (flame retardants).

The highest concentration of any chemical found was 2,557 ng/g (ng/g = parts per billion) of the DDT metabolite p,p’-DDE. The use of DDT was banned in the UK more than 20 years ago.

The most frequently detected chemicals were PCB congeners 99 and 118 and the DDT metabolite p,p’-DDE, which were detected in all but one of the 155 volunteers.

Ten chemicals were found in more than 95 per cent of volunteers (PCB congeners 99, 118, 138, 153, 156, 170, 180, 194, PBDE 153 and the organochlorine pesticides --HCH and p,p’- DDE).

This is the first survey to identify the widespread contamination of non-occupationally exposed people to the deca-BDE brominated flame-retardant product. Worryingly, the highest levels found in our non-occupationally exposed volunteers were very similar to those observed in Sweden of people occupationally exposed to deca-BDE.

We are being contaminated daily by ‘unregulated’ chemicals of unknown toxicity, such as the deca-BDE flame retardant. Since there is a dearth of knowledge on the levels of brominated flame-retardants in the UK population, it is not possible to determine any trend in contaminant levels.

PCB contamination is gradually decreasing from levels found in the UK 10 years ago - which indicates that strong regulations work.

Small numbers of people continue to be exposed and contaminated with high levels of certain chemicals, although median levels of some chemicals are decreasing compared with some earlier studies.

Volunteers tested in Nottingham had the highest median level of total chemical contamination of the chemicals we looked for. They also had the highest median level of PCBs, organo-chlorine pesticides and of DDT and its metabolites. Further regional findings are presented in Appendix 1.

The lifestyle questionnaire identified two factors which significantly affected the level of contamination of individual chemicals: older people have higher levels of PCBs in their blood; and women have lower levels of certain PCBs than men and the levels appear to reduce in relation to the number of children they carried and breast-fed. These differences seem to be related to women “off-loading” some of their chemical burden to their children.”

Endocrine Disrupting Chemicals

The late Theo Colborn53 (1927-1914) was the first to research and write about EDCs, man-made chemicals that became widespread in the environment after WW II. In a book published in 1996, Our Stolen Future: How Man-made Chemicals are Threatening our Fertility, Intelligence and Survival, Colborn, Dumanoski and Peters revealed the full horror of what was happening to the world as a result of contamination with EDCs.54 There was emerging scientific research about how a wide range of man-made chemicals disrupt delicate hormone systems in humans. These systems play a critical role in processes ranging from human sexual development to behaviour, intelligence, and the functioning of the immune system. At that stage, polychlorinated biphenyls (PCBs), pesticides DDT, chlordane, lindane, aldrin, dieldrin, endrin, toxaphene, heptachlor, dioxin, atrazine and daethal were identified as EDCs. Colborn illustrates the problem by constructing a diagram (page 105) of the journey of a PCB molecule from a factory in Alabama into a polar bear in the Arctic. Colborn says: “The concentration of persistent chemicals can be magnified millions of times as they travel to the

53 http://endocrinedisruption.org/about-tedx/theo-colborn
54 Our Stolen Future: How Man-made Chemicals are Threatening our Fertility, Intelligence and Survival: Colborn, Myers and Dumanoski: Little, Brown and Company, New York. 1996.
ends of the earth...Many chemicals that threaten the next generation have found their way into our bodies. There is no safe, uncontaminated place.”

Monsanto concealed the dangers of PCBs, Agent Orange and glyphosate: each time they were forced by Attorneys to publish internal documents that showed they had known for many years

Poison Papers: Monsanto knew PCBs were toxic for years but sold them anyway
In a major lawsuit against Monsanto over PCB (polychlorinated biphenyls) contamination throughout the state. Before switching operations to agriculture, Monsanto was the primary manufacturer of PCBs, which was used for paints, electrical equipment and other products, from 1935 until 1977. The U.S. Environmental Protection Agency (EPA) banned PCBs in 1979 due to its link to birth defects and cancer in laboratory animals. PCBs can have adverse skin and liver effects in humans and can also linger in the environment for many decades.

But according to documents published by The Poison Papers project, a new online archive of more than 20,000 documents obtained from federal agencies and chemical manufacturers, Monsanto possibly knew as early as the 1960s—at least a decade before the federal ban—that PCBs were harmful to public health and the environment but continued to manufacture and sell the widely used product anyway. Further, the document says that "direct lawsuits are possible" because "customers using the products have not been officially notified about known effects nor [do] our labels carry this information."

The secret corporate plan presented three courses of action, with each action corresponding to "profit and liability" flow charts. The actions are, "Do nothing", "discontinue manufacture of all PCBs" or "respond responsibly." "At the same time that Monsanto was telling the public that that PCBs were safe, they were literally graphing their potential legal liability against the lost profits and public image boost that might accompany being responsible and honest," Sherman commented to the Guardian. "At the end of the day, Monsanto went for the profits instead of for public health and environmental safety." Monsanto’s vice president of global strategy, Scott Partridge, did not contest the authenticity of the documents. "More than 40 years ago, the former Monsanto voluntarily stopped production and sale of PCBs prior to any federal requirement to do so," Partridge told the Guardian. "At the time Monsanto manufactured PCBs, they were a legal and approved product used in many useful applications. Monsanto has no liability for pollution caused by those who used or discharged PCBs into the environment."

Monsanto and three other companies lose lawsuit over PCBs: Monsanto concealed PCB dangers
May 25 2016: St. Louis jury awarded $17.5 million in damages to three people, along with $29 million in punitive damages against Monsanto and three other companies. The PCB lawsuit charged that Monsanto and the others were negligent in PCB production.55
The lawsuit alleges Monsanto knew about PCB dangers decades ago, yet lied to the public, claiming the compounds were safe. Monsanto continued selling PCBs into the 1970s. Rivers, streams, some foods we eat and some things we drink still contain PCBs at measurable levels.
Plaintiffs’ lawyer Steven Kherker of Houston said, “This is the future. People don’t know that PCBs cause cancer and that Monsanto has been suppressing” (that fact).

Vietnam’s Foreign Ministry has called attention to the link between a recent U.S. judicial verdict against Monsanto for Roundup and the dioxin victims in Vietnam.56
The ministry’s spokeswoman, Le Thi Thu Hang, stressed in a statement on Thursday that the March 19 verdict by a San Francisco jury is yet more evidence that weedicides could cause direct damage to the human body. In the judgment, the court concluded that exposure to the agrochemical giant

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Monsanto's weed killer Roundup was a "substantial factor" in giving Edwin Hardeman, 70, of California non-Hodgkin's lymphoma and ordered the firm to pay him nearly $81 million in damages, compensation and medical expenses. "As a nation that had suffered the heavy consequences of war, including Agent Orange, Vietnam demands that the companies that had provided the U.S. military with defoliants during the war must have the responsibility to help and assist in overcoming the damage caused by Agent Orange to Vietnam's people and environment," Hang said.

She also welcomed the U.S. Congress and government for assisting in resolving the consequences of war in Vietnam, saying this is widely supported by the people of both countries. Hang said Vietnam wishes for these efforts to be continued with the participation of the companies responsible, including Monsanto. Founded in 1901 in Missouri, Monsanto began producing agrochemicals in the 1940s. It was acquired by Bayer for more than $62 billion June 2018.

Monsanto was one of the producers of Agent Orange, the defoliant used by U.S. troops to strip Vietnamese forces of ground cover and food. Between 1961 and 1971 the U.S. Army sprayed some 80 million liters of Agent Orange over 30,000 square miles of southern Vietnam. Dioxin, a highly toxic chemical in the defoliant, has been linked to many major health problems such as cancer, mental disabilities and birth defects. Millions of Vietnamese over several generations have suffered from health problems due to exposure to Agent Orange, according to government data.

In 2004 Vietnamese victims of Agent Orange filed a class action lawsuit in a New York court against Monsanto, Dow Chemical and more than 30 manufacturers of the toxic defoliant. But the case was dismissed by the U.S. court citing "lack of evidence."

The US awarded compensation to US Vietnam Veterans for disabilities from Agent Orange over several generations.57

How Roundup poisoned our nature reserve58

Swansea is dubbed 'the Japanese Knotweed Capital of Europe'. Monsanto, whose factory is still in Newport, used Swansea as the testbed of its flagship herbicide, Roundup. It was first marketed in 1974 as a safe weedkiller. Roundup was sprayed time and time again on Japanese Knotweed until it became a superweed, just like the weeds in the US, where they grow Roundup Ready crops. It is a waste of money for Councils to continue to spray Roundup because however much is sprayed it cannot be killed and it is poisoning human health and the environment. Research has traced the resistance mechanism in Palmer amaranth (Amaranthus palmeri) to 5-enolpyruvoylshikimate-3-phosphate synthase (EPSPS) gene amplification. Resistant weed populations from Georgia contained 5-fold to 160-fold more copies of the EPSPS gene, compared to susceptible plants. Moreover, EPSPS gene amplification is heritable, leading Gaines et al.59 to warn that the emergence of GR weeds "endangers the continued success of transgenic glyphosate-resistant crops and the sustainability of glyphosate as the world’s most important herbicide. " Resistant Palmer amaranth (Amaranthus palmeri) has spread dramatically across southern states since the first resistant populations were confirmed in 2005, and already poses a major economic threat to U.S. cotton production. Some infestations are so severe that cotton farmers have been forced to leave some crops un-harvested."

In 1971, the British Association for the Advancement of Science held its Annual Meeting in Swansea. The book of the proceedings weighs 1.4 kg and is nearly 400 pages long. It is called Swansea and its Regions. It coincided with the cleaning up the valleys from industrial dereliction. In the 18th and 19th centuries the Swansea and Neath Valleys were the most concentrated industrial areas in Europe. Coal, iron, steel, copper, zinc and aluminium mining all in one region. There was a shipping industry,

57 http://vetsnational.com/agent-orange-compensation-claims/
59 http://www.pnas.org/content/107/3/1029?ijkey=e2066eddc44a8e0f054b2e1cbb0fdcc5a6b000c&keytype2=东方财富
sailing boats with seamen going around Cape Horn (the Cape Horner’s), culture (male voice choirs and Eisteddfods) and close-knit communities. There was a scholarly introduction from the Leader of Swansea City and County Council.

**The Health and Safety Executive, Defra and the Chemical Regulations Division protects Monsanto**

Between 2014 and 2017 I begged HSE, Defra and the Chemical Regulation Division on several occasions to ask the Council to stop spraying Roundup on our nature reserve because it was being poisoned. Eventually they told me that if I raised the matter again, they would not reply.

-------- Forwarded Message --------

**Subject:** Roundup sprayed in Swansea - CETO/358/16  
**Date:** Tue, 20 Dec 2016 11:26:06 +0000  
**From:** Dan.Manghai@hse.gov.uk  
**To:** rosemary.mason01@btinternet.com

Dear Dr Mason,

Thank you for your emails and attachments of 9 and 19 December to HSE’s Chair, Martin Temple, and the one of 14 December to me. Further to my acknowledgement of 9 December I am now writing with a substantive response. The various points you raise have been addressed in previous correspondence between you and HSE or Defra so there is nothing further to add on these. With regard to your key point on the use of glyphosate by Swansea Council, glyphosate is approved as a pesticide active substance in the EU and glyphosate products are authorised for use in the UK. The Council’s duty in this case is to use pesticide products which are authorised in the UK and to comply with the rules on use of pesticides. In doing this, it is for the Council to decide how it chooses to control weeds in its area not HSE.

Yours sincerely,

Dan Manghai  
Chief Executive, Parliamentary and Secretariat Office  
Health and Safety Executive

From about 2000, the people in Swansea became fatter and fatter, with increasing levels of weedkiller in their diet, and having been exposed to Roundup sprayed on them since 1975. Some are now grossly obese, have Type 2 Diabetes, neurodegenerative disorders, and their children have autism and birth defects. These are epigenetic changes. Changes that take place in the second and third generations (see immediately below). I could weep to see what has happened to Swansea, Dylan Thomas’s ‘ugly, lovely, town.’

Epigenetic changes also took place in Vietnam after Agent Orange had been sprayed on the vegetation as a defoliant. They affected Vietnamese families and families of the US War veterans.

**Glyphosate causes serious multi-generational health damage to rats**

Washington State University (WSU) researchers have found a variety of diseases and other health problems in the second- and third-generation offspring of rats exposed to glyphosate, the world’s most used weed killer. In the first study of its kind, the researchers saw descendants of exposed rats developing prostate, kidney and ovarian diseases, obesity and birth abnormalities. Michael Skinner, a WSU professor of biological sciences, and his colleagues exposed pregnant rats to the herbicide between their eighth and 14th days of gestation. The dose—half the amount expected

[^60]: [https://www.nature.com/articles/s41598-019-42860-0](https://www.nature.com/articles/s41598-019-42860-0)
to show no adverse effect—produced no apparent ill effects on either the parents or the first generation of offspring.

But writing in the journal *Scientific Reports*, the researchers say they saw “dramatic increases” in several pathologies affecting the second and third generations. The second generation had “significant increases” in testis, ovary and mammary gland diseases, as well as obesity. In third-generation males, the researchers saw a 30 percent increase in prostate disease—three times that of a control population. The third generation of females had a 40 percent increase in kidney disease, or four times that of the controls. More than one-third of the second-generation mothers had unsuccessful pregnancies, with most of those affected dying. Two out of five males and females in the third generation were obese. Skinner and his colleagues call this phenomenon “*generational toxicology*” and they’ve seen it over the years in fungicides, pesticides, jet fuel, the plastics compound bisphenol A, the insect-repellent DEET and the herbicide atrazine. At work are epigenetic changes that turn genes on and off, often because of environmental influences.

In December 2019 I was asked to present a paper to the Natural Environment Panel of Swansea City and County Council on how glyphosate-based herbicides poisoned our nature reserve. I told them that however much Roundup was sprayed on Japanese Knotweed, it wasn’t possible to kill it. The Council Officers said unless I was to suggest an alternative chemical it wasn’t feasible to eradicate it mechanically. Since we have been in lockdown in a flat in Swansea Marina, Roundup has been sprayed twice, the first time within 2 metres of our balcony. We have seen few insects.

**The UK State of Nature is dire because of multiple pesticides applied to crops**

Jon Snow, C4 News, presented a programme on the 2019 UK State of Nature. 61

He told Phil Jarvis of the NFU and Prof Rosie Hails, former Chair of ACRE, the Advisory Committee for Releases (of GMOs) into the Environment: “*We all thought it was climate change; now we are told we’re actually poisoning the land with our agriculture. Where does farming start – or end – and the government begin? The government has a very big hand in how you behave on your land. There is some very strong language in this report. Do you think the farmers understand that they are poisoning the soil?*” Phil Jarvis said “I don’t recognise the language.” – He said, “*I set aside 11% of the land each year fallow for nature.*” Jon Snow said “*How long does it take for the land to recover from these poisons?*” Mr Jarvis failed to answer that question. He gave the impression that pesticides were ‘a last resort.’

**Number of pesticide active ingredients sprayed on crops rose alarmingly between 1975 and 2014**

At the Royal Society of Medicine Conference on pesticides safety the Soil Association organised by its Policy Director, the late Peter Melchett, presented alarming figures. 62 New evidence suggests pesticide use has seen a massive increase in the UK over the last 40 years, with potential impacts on human health, delegates at a Royal Society of Medicine conference have heard today [1]. This is in sharp contrast to the claim by the pesticide industry that use has halved [2].

Under FOI request FERA Science (previously a government agency, now privatized) provided figures that showed that the number of active ingredients applied to wheat had risen **12-fold** from 1.7 in 1974 to 20.7 in 2014; that those applied to potatoes had risen **5.8** times from 5.3 in 1975 to 30.8 in 2014; that those applied to onions and leeks had risen **18-fold** from 5.3 in 1975 to 30.8 in 2014.

**The latest figures on the growth in organic farming to enhance biodiversity in the EU** 63

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“The highest share of organic farming was reported in the Salzburg region of Austria, where about half (52%) of the total agricultural area was used for organic farming in 2016 (the latest year for which regional data are available). There were a further seven regions where organic farming accounted for upwards of one-quarter of total used agricultural area: Severozápad in the Czech Republic (30%), Norra Mellansverige in Sweden (29%), Calabria in Italy (29%), Mellersta Norrland in Sweden (28%), Burgenland in Austria (27%), Sicilia in Italy (26%), and Moravskoslezsko in the Czech Republic (25%). Latest UK figures show that organic farming represents less than 3% of the total farmed area on agricultural holdings.”

According to Global Chemicals Outlook II, Glyphosate is top of the Top 10 products used on major crops in the United States by volume, 1968 and 2016. It is the top of the silent killers because no one dares to mention it. Monsanto would have sued anyone who did. Bayer, which now owns Monsanto, probably would too. Glyphosate is the prime candidate because it has multiple actions. It is an herbicide, an antibiotic, a fungicide, an antiprotozoal, an organic phosphonate, a growth regulator, a toxicant, a virulence enhancer and is persistent in the soil. It chelates (captures) and washes out the following minerals: boron, calcium, cobalt, copper, iron, potassium, magnesium, manganese, nickel and zinc.

Continued growth of synthetic chemicals in the pesticide/crop protection industry

“Pesticides include herbicides, insecticides, termiticides, nematicides, rodenticides and fungicides. These products are largely used for crop protection in agriculture. Today the industry is valued at over US dollars 50 billion and there are around 600 active ingredients. Herbicides account for approximately 80 per cent of all pesticide use” (Phillips McDougal 2018).

**Top 10 products used on major crops in the United States by volume, 1968 and 2016 (Phillips McDougal 2018, p. 4)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glyphosate</td>
<td>an herbicide, an antibiotic, a fungicide, an antiprotozoal, an organic phosphonate, a growth regulator, a toxicant, a virulence enhancer and is persistent in the soil. It chelates (captures) and washes out the following minerals: boron, calcium, cobalt, copper, iron, potassium, magnesium, manganese, nickel and zinc. (Monsanto/Bayer)</td>
</tr>
<tr>
<td>Metolachlor</td>
<td>an organochlorine, selective herbicide</td>
</tr>
<tr>
<td>Pyraclostrobin</td>
<td>a fungicide (Aldrich-Sigma)</td>
</tr>
<tr>
<td>Mesotrione</td>
<td>an herbicide (Syngenta)</td>
</tr>
<tr>
<td>Thiamethoxam</td>
<td>a neonicotinoid insecticide (Syngenta)</td>
</tr>
<tr>
<td>Acetochlor</td>
<td>an herbicide (Monsanto and Zeneca)</td>
</tr>
<tr>
<td>Azoxyastrobin</td>
<td>a systemic fungicide (Syngenta)</td>
</tr>
<tr>
<td>Atrazine</td>
<td>an endocrine-disrupting herbicide (Syngenta)</td>
</tr>
<tr>
<td>Abamectin</td>
<td>an insecticide, acaricide, nematicide</td>
</tr>
<tr>
<td>Clothianidin</td>
<td>a long acting (545 (13-1386) days) systemic neonicotinoid insecticide (Bayer)</td>
</tr>
</tbody>
</table>

DuPont made Perfluorooctanoic Acid (PFOAs) for Teflon coating for saucepans

Jon Snow interviewed Mark Ruffalo, who starred as Mark Bilott, the Attorney who changed sides in *Dark Water*. In 2017, Bilott won a $671 million settlement on behalf of more than 3,500 plaintiffs. Those people claimed they had contracted diseases, among them kidney

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64 https://wedocs.unep.org/bitstream/handle/20.500.11822/28113/GCOII.pdf?sequence=1&isAllowed=y
cancer and testicular cancer, from chemicals DuPont allegedly knew may have been dangerous for decades, and allowed to contaminate their drinking water anyway.

**Monsanto had known that PCBs were dangerous for decades and covered up the risks**

**Monsanto had known that Roundup caused cancers since the 1980s, but covered up the risks**

Monsanto’s German owner Bayer AG has confirmed that more than 52,500 people have filed suit against Monsanto alleging that exposure to Roundup herbicide caused them or their loved ones to develop non-Hodgkin lymphoma, and that Monsanto covered up the risks. As part of the discovery process, Monsanto has had to turn over millions of pages of its internal records. The Monsanto Papers and other court records are shared here.

**In the Houses of Parliament in Westminster**

**Chemical Brain Drain:** Compare the rowdy and low quality of debate amongst certain politicians in Westminster on the subject of Brexit with 1975 pre-Roundup, when Panorama recorded a civilised and knowledgeable debate between Tony Benn and Roy Jenkins on the European Communities membership.

**Letter on behalf of Lord Gardiner of Kimble the Defra Minister in the House of Lords about glyphosate**

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----- Forwarded message -----\nFrom: no-reply@defra.ecase.co.uk on behalf of Ministerial Contact Unit <correspondence.section@defra.gov.uk>
To: "rosemary.mason01@btinternet.com" <rosemary.mason01@btinternet.com> Sent: Tuesday, 5
November 2019, 11:23:05 GMT
Subject: Glyphosate - Ref: TO2019/22109

Dear Dr Mason,

Thank you for your email of 20 October to Lord Gardiner, in which you provided a link to an article about herbicides, in particular glyphosate. I have been asked to reply.

The Government’s first priority with regard to herbicides and other pesticides is to ensure that they will not harm people or pose unacceptable risks to the environment. To this end, we operate a strict system for regulating pesticides. Decisions on the use of pesticides are based on a careful scientific assessment of the risks, and a pesticide may only be placed on the market in the UK if the product has been authorised by our expert regulator, the Health and Safety Executive (HSE). Following a thorough risk assessment, HSE imposes conditions on the way pesticides are used to ensure there is no harm to human health and no unacceptable effects on the environment. Pesticides that pose unacceptable risks are not authorised.

Glyphosate is no exception to this and, as for all pesticides, is subject to restrictions to ensure that its use will not harm people or have unacceptable effects on the environment. UK experts participated in the European Food Safety Authority’s assessment of glyphosate and support its conclusions that all the safety standards are met. The Government therefore agrees with the EU
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66 https://usrtk.org/monsanto-papers/
67 https://www.youtube.com/watch?v=_zBFh6bpcMo
decision to approve glyphosate for continuing use. We will continue to keep an active watch on the scientific evidence on glyphosate.

Yours sincerely,

Ministerial Contact Unit

The UN Special Rapporteur on Toxics and Human Rights, Baskut Tuncak wrote in the Guardian on 06/11/2017: The EU and glyphosate: it’s time to put children’s health before pesticides

“A pending decision on Monsanto’s ubiquitous weedkiller is a crucial opportunity to protect our children from the toxic cocktail of pesticides polluting their food, water and play areas.”

“Our children are growing up exposed to a toxic cocktail of weedkillers, insecticides, and fungicides. It’s on their food and in their water, and it’s even doused over their parks and playgrounds. Many governments insist that our standards of protection from these pesticides are strong enough. But as a scientist and a lawyer who specialises in chemicals and their potential impact on people’s fundamental rights, I beg to differ. Last month it was revealed that in recommending that glyphosate – the world’s most widely-used pesticide – was safe, the EU’s food safety watchdog copied and pasted pages of a report directly from Monsanto, the pesticide’s manufacturer. Revelations like these are simply shocking.

The UN Convention on the Rights of the Child, the most ratified international human rights treaty in the world (only the US is not a party), makes it clear that states have an explicit obligation to protect children from exposure to toxic chemicals, from contaminated food and polluted water, and to ensure that every child can realise their right to the highest attainable standard of health. These and many other rights of the child are abused by the current pesticide regime. These chemicals are everywhere and they are invisible. The only way to protect citizens, especially those disproportionately at risk from exposure, is for governments to regulate them effectively, in large part by adhering to the highest standards of scientific integrity.

Paediatricians have referred to childhood exposure to pesticides as creating a “silent pandemic” of disease and disability. Exposure in pregnancy and childhood is linked to birth defects, diabetes, and cancer. Because a child’s developing body is more sensitive to exposure than adults and takes in more of everything – relative to their size, children eat, breathe, and drink much more than adults – they are particularly vulnerable to these toxic chemicals. Increasing evidence shows that even at “low” doses of childhood exposure, irreversible health impacts can result. But, most victims cannot prove the cause of their disability or disease, limiting our ability to hold those responsible to account.

In light of revelations such as the copy-and-paste scandal, a careful re-examination of the performance of states is required. The overwhelming reliance of regulators on industry-funded studies, the exclusion of independent science from assessments, and the confidentiality of studies relied upon by authorities must change.”

Rosemary Mason 14 May 2020

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68 https://www.theguardian.com/environment/2017/nov/06/the-eu-and-glyphosate-its-time-to-put-childrens-health-before-pesticides