

## **Testimony in Opposition to North Dakota House Bill 1318**

### **Delivered to the North Dakota Legislative Assembly**

**March 13, 2025**

Good morning, honorable members of the Senate Agriculture and Veterans Affairs Committee.

My name is Dr. Steve Nagel, DC, and I would like to voice my opposition to House Bill 1318, a piece of legislation that I believe undermines the safety, transparency, and sovereignty of North Dakota's agricultural communities. While this bill is framed as a means to ensure uniformity in pesticide regulation by prioritizing federally approved labels, I urge you to consider the broader implications—particularly the influence of corporate interests like the Modern Ag Alliance and its founder, Bayer, whose troubling history and mounting scientific evidence raise serious concerns that their labeling is simply not enough to protect the people in around their products.

The Modern Ag Alliance, a key proponent of HB 1318, was founded by Bayer, a multinational corporation with a long and checkered legal record. Bayer, known for its dominance in agrochemicals and pharmaceuticals, has faced numerous lawsuits and fines that call into question its credibility as a steward of public health and environmental safety. Most notably, Bayer inherited significant legal liabilities when it acquired Monsanto in 2018, including tens of thousands of lawsuits related to the herbicide Roundup. Courts across the United States have awarded billions in damages to plaintiffs who allege that glyphosate, Roundup's active ingredient, caused cancer—a claim Bayer continues to dispute despite overwhelming jury verdicts. To date, Bayer has agreed to pay over \$10 billion to settle these cases, with additional litigation still pending.

### **The Monsanto Emails: A Window into Corporate Deception**

Perhaps most damning are the internal emails uncovered during the Roundup litigation against Monsanto, which Bayer now owns. These documents, made public in court proceedings starting in 2017, reveal a disturbing pattern of manipulation and disregard for scientific integrity. In one email exchange, **Monsanto executives discussed ghostwriting scientific studies to downplay glyphosate's risks, then having "independent" researchers sign off on them to lend credibility.** Another email from a Monsanto toxicologist infamously stated, **"If I can kill this, I should get a medal," referring to an EPA review of glyphosate's safety. The emails also showed Monsanto's efforts to influence regulators and discredit critics, including funding smear campaigns against scientists like Dr. Gilles-Éric Séralini, whose research suggested glyphosate's potential harm. These revelations led juries to conclude that Monsanto—and now Bayer—prioritized profits over people, a conclusion that should alarm anyone considering HB 1318's implications.**

### **Research on Cancer-Causing Effects**

Scientific studies increasingly link glyphosate to cancer, contradicting Bayer's claims of safety. A 2019 meta-analysis by Zhang et al., published in Mutation Research, reviewed six human studies with nearly 65,000 participants and found a **41% increased risk of non-Hodgkin lymphoma (NHL)** among those with high glyphosate exposure. The International Agency for Research on Cancer (IARC) classified glyphosate as "probably carcinogenic to humans" in 2015, citing strong evidence

from animal studies where glyphosate induced malignant lymphomas in mice. More recently, a 2023 study from the University of California, Berkeley, reinforced this, identifying glyphosate as a **probable human carcinogen based on updated epidemiological data**. These findings challenge the EPA's stance that glyphosate is "not likely to be carcinogenic," a position critics argue relies on outdated or industry-influenced data.

#### Research on Neurologic Problems

Emerging research also ties glyphosate to neurologic harm, raising red flags for North Dakota's farming families. **A 2023 study in Journal of Exposure Science & Environmental Epidemiology examined U.S. adults and found a significant correlation between urinary glyphosate levels and elevated serum neurofilament light chain (NfL), a biomarker of neuroaxonal damage, particularly in those over 40. This suggests glyphosate may contribute to neurological disorders.** Additionally, a December 2023 study in Science of the Total Environment exposed mice to glyphosate during pregnancy, **resulting in offspring with anxiety- and depression-like behaviors linked to gut-brain axis disruption.** A 2024 study published in Nature Reviews Neurology further called for renewed scrutiny, arguing glyphosate's neurotoxicity may implicate it in **Parkinson's disease**—a concern echoed by The Lancet in 2023, urging stricter regulations.

#### Research on Testosterone Destruction

Glyphosate's impact on reproductive health, particularly testosterone, is another alarming finding. For example, a study out of Toxicology In Vitro found that "A glyphosate-based herbicide induces necrosis and apoptosis in mature rat testicular cells in vitro, and testosterone decrease at lower levels". Yes. Their testicles were destroyed.

Other research shows glyphosate directly attacks mitochondria in Leydig cells of mice, inhibiting testosterone synthesis—a compelling case for choosing organic alternatives. A 2019 study in Environmental Health by the Ramazzini Institute found that glyphosate-based herbicides (GBHs) at "safe" doses (1.75 mg/kg/day) increased testosterone in female rats and altered male reproductive hormones, including dihydrotestosterone (DHT), after prolonged exposure. In vitro studies, like Walsh et al. (2000) in Environmental Health Perspectives, showed Roundup disrupted steroidogenesis in Leydig cells, reducing testosterone production at concentrations as low as 25 µg/ml. **These effects on endocrine function could have generational consequences for North Dakotans. As a clinician who measures testosterone multiple times a week, there is no doubt we have a testosterone crisis in North Dakota.**

#### **Bayer's Broader Legal History**

Beyond Roundup, Bayer's legal troubles extend further. In 2020, the U.S. Department of Justice secured a \$40 million settlement from Bayer in a kickback case prosecuted in the District of Minnesota. This case involved Bayer's predecessor, Bayer HealthCare Pharmaceuticals, which was accused of **violating the False Claims Act by paying illegal kickbacks to healthcare providers to prescribe its drugs**, defrauding federal healthcare programs like Medicare and Medicaid. The \$40 million fine was part of a broader \$257 million settlement that included penalties for misbranding and other misconduct. In 2019, Bayer paid \$191 million to settle lawsuits over its Essure birth control device, which caused severe injuries to thousands of women. In 2007, Bayer faced fines

and lawsuits after its hemophilia drug was linked to HIV infections in patients during the 1980s. **This pattern of prioritizing profit over ethics should give us pause when considering Bayer's influence on HB 1318.**

HB 1318 seeks to lock in federal pesticide labels as the sole standard, stripping away the ability of local governments and state agencies to impose stricter regulations when necessary. **This is not about uniformity—it's about freeing themselves of liability for already-known risks. When we give unethical companies like Bayer unchecked power: they manipulate science, silence dissent, and leave communities to bear the consequences.** North Dakota farmers and residents deserve the right to protect their land, water, and health from potentially harmful chemicals, especially when federal standards may lag behind emerging science or fail to account for local conditions. Bayer and the Modern Ag Alliance argue that this bill protects farmers, but who is it really protecting? A corporation with a track record of fines, settlements, and deceptive practices has no business overriding our state's autonomy.

I implore you to reject HB 1318. Let's prioritize the voices of North Dakotans—our farmers, our families, and our communities—over the interests of a company like Bayer, whose history, laid bare in courtrooms, email inboxes, and scientific journals, speaks louder than its promises. Thank you for your time and consideration.

Steve Nagel, DC, BSN

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