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Attorneys for Plaintiff
DEWAYNE JOHNSON

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF SAN FRANCISCO

DEWAYNE JOHNSON,

Plaintiff,

v.

MONSANTO COMPANY

Defendants.

Case No. CGC-16-550128

DECLARATION OF CURTIS G. HOKE IN SUPPORT OF PLAINTIFF'S TRIAL BRIEF REGARDING ADMISSIBILITY OF EXHIBIT 308 AND DR. SAWYER'S OPINION REGARDING DIETARY EXPOSURE

Hon. Suzanne R. Bolanos

Department: 504

REDACTED

DECLARATION OF CURTIS G. HOKE

I, Curtis Hoke, declare and state:

1. I am an attorney at law admitted to practice before all of the courts in the state of California. I am an attorney at The Miller Firm, LLC, attorneys of record for Plaintiff Dewayne Johnson. I am over eighteen years of age and am fully competent to make this Declaration in support of Plaintiff's Trial Brief Regarding Admissibility Of Exhibit 308. Except as otherwise expressly stated below, I have personal knowledge of the facts stated in this declaration, and if called to testify, I could and would competently testify to the matters stated herein.

2. Attached hereto as **Exhibit A** is a true and correct copy of excerpts from the transcript of the Deposition of Daniel Goldstein taken February 27, 2018

3. Attached hereto as **Exhibit B** is a true and correct copy of an email between Daniel Goldstein and Bruce Chassy dated March 3, 2010 and produced by Monsanto in discovery, bates numbered MONGLY01249878

4. Attached hereto as **Exhibit C** is a true and correct copy of the 2008 Curriculum Vitae of Donna Farmer produced by Monsanto in Discovery.

5. Attached hereto as **Exhibit D** is a true and correct copy of excerpts of the January 11-12th, 2017 deposition of Donna Farmer.

6. Attached hereto as **Exhibit E** is a true and correct copy of excerpts of the expert report of Dr. William Sawyer

7. Attached hereto as **Exhibit F** is a true and correct copy of excerpts of the deposition of Dr. William Sawyer.

8. Attached hereto as **Exhibit G** is a true and correct copy of excerpts of the April 3, 2018 affidavit of Dr. William Sawyer.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on July 6, 2018 in Orange, Virginia.

By: 

Curtis G. Hoke,
Declarant

EXHIBIT A

LODGED CONDITIONALLY UNDER SEAL

EXHIBIT B

LODGED CONDITIONALLY UNDER SEAL

EXHIBIT C

LODGED CONDITIONALLY UNDER SEAL

EXHIBIT D

LODGED CONDITIONALLY UNDER SEAL

EXHIBIT E

TCAS

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Toxic Exposures · Environmental Testing · Risk Assessment · Forensic Toxicology · Causation Evaluation

Toxicological Assessment of Dewayne Johnson and Toxicological Risk Assessment of Glyphosate and Roundup® and Ranger PRO® Formulations

William R. Sawyer, Ph.D., D-ABFM
Toxicologist

December 21, 2017

Prepared for

Michael J. Miller, Esq.
Jeffrey A. Travers, Esq.
Timothy Litzenburg, Esq.

The Miller Firm, LLC
108 Railroad Avenue
Orange, VA 22960

that ranged from 15 - 25 grams with the midpoint at 20 grams. Kumar, 2001, cited mice weights ranging from 25 - 47 grams with the midpoint at 36 grams. The midpoint weights were used for HED determination.

Table 22

Calculated Human Equivalent Doses (HED) for the Lymphoma Incidence Data Used for Dose-Response Modeling

Study	Strain/ Species	Initial Midpoint Mice BW (kg)	Animal Dose (mg/kg/day)	HED (mg/kg/day)[a]
Sugimoto, 1997	CD-1 Mice	0.02	0	0
		0.02	165	21.5
		0.02	838.1	109
		0.02	4,348	565.3
Kumar, 2001	Swiss Albino Mice	0.036	0	0
		0.036	14.7	2.21
		0.036	150.5	22.7
		0.036	1,460.3	219.9
Wood, et al., 2009b	CD- 1 Mice	0.027	0	0
		0.027	71.4	10
		0.027	234.2	32.8
		0.027	810	113.5

[a] HEDs are calculated as HED = (animal dose) x (animal BW / Human BW)$^{0.25}$

Cancer Risk Assessment Results: Cancer Slope Factor (CSF) Basis

Cancer risk level is determined as a consequence of applying a standard set of equations as established by U.S. EPA to specific variables as shown in the equations below. This section presents cancer risk level calculations using the cancer slope factor (CSF) for glyphosate exposures to herbicide applicators and the general population as well as dietary exposure cancer risk to the U.S. general population

Cancer Risk for Herbicide Applicators and the General Population

The cancer risks introduced from dietary glyphosate within the general U.S. population as well as to exposed farmers and applicators is calculated based on determined glyphosate exposure doses and the frequency and duration of exposure to the carcinogen (glyphosate). This is then spread across the lifetime of the individual. The calculation uses the cancer slope factor and is determined by the following equation:

$$Cancer\ Risk = \frac{Exposure\ dose\ X\ risk\ factor\ (cancer(oral)\ slope\ factor) X\ years\ of\ exposure}{70\ years\ (lifetime)}$$

Cancer Risk to the U.S. General Population via Dietary Exposure

Glyphosate exposures occur through dietary consumption of glyphosate residue on food and in drinking water. As reported in Solomon, (2016),[266] the U.S. EPA Dietary Exposure Evaluation Model (DEEM) estimates the average exposure of the general population to glyphosate as 0.088 mg/kg bw/day from an estimate that ranged from 0.058 – 0.23 mg/kg bw/day.

Consequently, the upper range of the dietary exposure cancer risk level is determined as:

$$Cancer\ Risk = \frac{\left[0.23\frac{mg}{kg}per\ day\ X\ 0.00169\left(\frac{mg}{kg}per\ day\right)^{-1}\ X\ 70\ years\right]}{70\ years\ (lifetime)} = 3.9\ X\ 10^{-4}$$

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[266] Solomon, K., "Glyphosate in the general population and in applicators: a critical review of studies on exposures," 2016, Critical Reviews in Toxicology, Vol.46: sup 1, 21 -27, DOI: 10.1080/10408444.2016.1214678

Table 26 displays the range of cancer risk levels from typical dietary exposure.

Table 26

Cancer Risk Levels Based on the U.S. EPA DEEM Estimated Dietary and Drinking Water Exposure to Glyphosate

(US DEEM exposures from Solomon, 2016)

Exposure	Dietary Residue and Drinking Water Dose	Cancer Risk Level
Low	0.058 mg/kg bw/day	9.8×10^{-5}
Average	0.088 mg/kg bw/day	1.5×10^{-4}
High	0.23 mg/kg bw/day	3.9×10^{-4}

Acceptable risk levels have been generally recognized and applied in public health for decades. Levels exceeding the *de minimus* level are generally considered unsafe. In this context, the above levels of cancer risk to the general public are clearly unacceptable as the generally accepted *de minimus* benchmark level for cancer risk is 1×10^{-6} (one in one million). [267]

However, slightly higher levels of cancer risk are often used in public health and are based upon prudent regulatory judgement. Factors for consideration include the impacted population size, reasonable availability of technology to reduce risk, beneficial aspects of the ruling, etc. For example, chlorination of public water is extremely beneficial to reduce morbidity and mortality, but chlorination carries a low level risk of cancer due to the formation of trihalomethane contaminants in the water.

Thus, a *de minimus* benchmark increase to 1×10^{-5} (one in one hundred thousand) is occasionally applied in such a regulatory context, but the cancer risk levels shown in Table 26 far exceed this "enhanced" risk level as well.

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[267] Payne-Sturges, DC, "Personal exposure meets risk assessment: A comparison of measured and modeled exposures and risks in an urban community," 2004, Environmental Health Perspectives, Vol. 112(5), pg. 589-598.

Table 31

Cancer Risk Levels for Spray Operator Exposures (Hydraulic Nozzles)

Hand-held Outdoor Hydraulic Nozzles	Percentage Dermal Absorption (mg/day)	Exposure Level for a 60 kg Operator, (mg/kg/day)	Cancer Risk Level	Including a Dietary Risk Level of 1.5×10^{-4}
No gloves	3	1.391	6.6×10^{-5}	2.1×10^{-4}
No gloves	5	2.318	1.1×10^{-4}	2.6×10^{-4}
No gloves	10	4.635	2.1×10^{-4}	3.7×10^{-4}
Gloves during mixing/loading	3	1.378	6.5×10^{-5}	2.1×10^{-4}
Gloves during mixing/loading	5	2.296	1.1×10^{-4}	2.6×10^{-4}
Gloves during mixing/loading	10	4.592	2.3×10^{-4}	3.7×10^{-4}
Gloves at all times	3	0.669	3.2×10^{-5}	1.8×10^{-4}
Gloves at all times	5	1.115	5.3×10^{-5}	2.0×10^{-4}
Gloves at all times	10	2.23	1.1×10^{-4}	2.5×10^{-4}
Boots, gloves, coveralls	3	0.254	1.2×10^{-5}	1.6×10^{-4}
Boots, gloves, coveralls	5	0.423	2.0×10^{-5}	1.7×10^{-4}
Boots, gloves, coveralls	10	0.846	4.0×10^{-5}	1.9×10^{-4}

Table 32: Compilation of Peer-Reviewed NHL Latency Estimates

Study/Source	Summary of Findings	Latency
USEPA Glyphosate Issue Paper: September, 2016[283]	"Some have argued that the follow-up period (median=7 years) in De Roos, et al. (2005) is not sufficiently long to account for the latency of NHL (Portier, et al., 2016); however, the latency period for NHL following environmental exposures is relatively unknown and **estimates have ranged from 1-25 years** (Fontana et al., 1998; Kato et al., 2005; Weisenburger, 1992)."	1 to 25 yrs
USEPA Glyphosate Issue Paper: September, 2016[283]	"Eriksson, et al., (2008) evaluated the impact of time since first exposure. This study found an increased effect estimate for subjects with **more than 10 years of glyphosate exposure prior to diagnosis** of NHL. This finding suggests a potential for a longer latency for NHL than the follow-up period in De Roos, et al. (2005)."	10 yrs
USEPA Glyphosate Issue Paper: September, 2016[283]	"Two case-control studies evaluating the risk of NHL (Eriksson, et al., 2008 and McDuffie, et al., 2001) observed increased effect estimates in the highest exposure categories analyzed. Eriksson, et al. (2008) found a greater effect estimate for subjects with >10 days (based on the median days of exposure among controls) and >10 years of exposure (for latency analysis) when compared to subjects with =10 days and 1-10 years of exposure, respectively; … however, given the latency analysis of NHL was limited to Eriksson, et al. (2008) and lack of NHL latency understanding in general, **further studies are needed to determine the true latency of NHL**. McDuffie, et al. (2001), stratifying based on the average number of days per year of exposure, observed similar effect estimates in the lower exposure category (>0 and =2 days/year) while a greater effect estimate was observed in the highest exposure category (>2 days/year)."	10 yrs
9-11 Monitoring and Treatment, World Trade Center Health Program[284]	"**A minimum latency period of 2 years** has been reported for non-Hodgkin lymphoma (Bennett, et al. 1991) following treatment of Hodgkin disease with chemotherapy and radiotherapy which is similar to the latency for secondary acute leukemia (Nadler and Zurbenko 2013; Tucker et al. 1988)."	0.4 to 2 yrs *(minimum)*

[283] USEPA, "Glyphosate Issue Paper: Evaluation of Carcinogenic Potential," USEPA's Office of Pesticide Programs, September 12, 2016, https://www.epa.gov/sites/production/files/2016-09/documents/glyphosate_issue_paper_evaluation_of_carcincogenic_potential.pdf

[284] "Minimum Latency & Types or Categories of Cancer," World Trade Center Health Program, Revised: January 6, 2015, https://www.cdc.gov/wtc/pdfs/WTCHP-Minimum-Cancer-Latency-PP-01062015.pdf

Toxicological Conclusions

Toxicologists cannot assume a position of advocacy. A scientifically credible expert opinion is based solely on objective, reliable evidence. Additionally, analysis must be performed without deviation from the prescribed methodology. Weight of evidence must take all possible factors into account before reaching any conclusions. A strong attempt has been made to apply those principles throughout this assessment.

Based on the totality of evidence available at this time, it is my opinion to reasonable toxicological certainty that the recent IARC classification of glyphosate as a Level 2A carcinogen is appropriate. Additionally, it is my opinion to reasonable toxicological certainty that some formulations of glyphosate have greater potential for carcinogenic health risks then calculated above based on enhanced absorption by adjuvants used in the products. Glyphosate has been demonstrated to induce (but may not be limited to) lymphopoietic malignancies as supported by multiple, independent chronic dietary animal studies as well as the body of human epidemiological literature as assessed by IARC.

Mr. Dewayne Johnson was diagnosed with mycosis fungoides, an infrequently encountered, rare T-cell lymphoma, approximately 2.25 years following his frequent mixing and application of glyphosate/co-formulants for the Benicia Unified School District. His absorbed dose of glyphosate was within the range of that encountered within the generally accepted toxicological and epidemiological literature among hydraulic applicators. Mr. Johnson's medical history, family history, genetic predisposition, prior occupational chemical exposures or lifestyle risk factors do not reveal any known risk factors for lymphoma. Based on the documented and inherent properties of glyphosate to produce lymphoma in animal studies as well as the results of statistically significant human epidemiological studies, I am certain to reasonable toxicological certainty that Mr. Johnson's glyphosate exposures induced or significantly contributed to the onset of his T-cell lymphoma (mycosis fungoides).

William R. Sawyer, Ph.D., D-ABFM

Chief Toxicologist

EXHIBIT F

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF SAN FRANCISCO

CASE NO.: CGC-16-550128

DEWAYNE JOHNSON,

Plaintiff,

vs.

MONSANTO COMPANY,

Defendant.

_____/

CONFIDENTIAL

Continued Videotaped Deposition of WILLIAM SAWYER, PH.D., taken at 1451 Middle Gulf Drive, Sanibel, Florida, commencing at 8:09 a.m. - 5:57 p.m., Tuesday, February 27, 2018, before Tracie Thompson, RMR, CRR, CLR, Registered Merit Reporter, Certified Realtime Reporter, Certified LiveNote Reporter.

JOB No. 2820385

PAGES 265 - 557

there was a second significant finding among the pairwise analyses. So this greatly exceeds the guidelines that EPA has dictated. The guideline that either/or. You don't have to have two different positive tests, one or the other. Here we have both.

When EPA reran these numbers in December of 2017, they still found positive trend tests, and the false positive rate was deemed negative for that trend. Again, that still meets the requirement of what we call the -- proving the null hypothesis; that is, proving that there is a causal connection between the glyphosate and the increasing dose response of cancer among the mice.

Q And the cancer in those mice was lymphoma, correct?

A I'm sorry?

Q Sorry. What was the cancer that was found to be statistically significant?

A Lymphoma.

Q You did analyze the cancer or cancer risk of the general population to dietary exposure of glyphosate, correct, in your report?

A I did. I used the US EPA data, which used the higher end of the risk.

Q And -- sorry, if you can give me a minute.

I'm just going to look at your report.

Okay. Yeah, so on page 146 of your report --

A All right.

Q -- do you see the paragraph below the chart beginning with "Acceptable risk levels"?

A Yes.

Q All right. It might be a little bit complicated for the jury. Can you explain to the jury, if you can, in lay people's terms, what that paragraph means?

A That means if a person was eating an American diet using only foods that were treated with glyphosate, such as browning of harvested wheat, GMO corn, GMO soybean and other GMO products which are designed to work in accordance with glyphosate, and the tolerance level, that is how much is allowed in the vegetable matter, if those two requirements were met, this would be the risk level.

Q And what do you mean by "de minimis benchmark level for cancer risk" in that paragraph?

A That the de minimis is one times 10 to minus 6 unless there's a benefit. For example, chlorinating water to prevent bacterial and viral infections, morbidity and death, the chlorine in

water is a benefit, but it does break down into a trihalomethane which can result in a 1 times 10 to the minus 6 or 5 times 10 to the minus 6 level risk. But yet that's accepted because it's essential and it's a benefit.

However, you know, an industry making a profit on a product is not a benefit for a human. It's -- so the risk levels that are applied to population are dependent upon whether it's an essential practice with a benefit for the population.

Q And on this chart, your average is -- for the cancer -- the risk level for average, you write 1.5 times 10 to the negative 4. Could you explain how that number compares to 1 times 10 to the negative 6?

A Well, it's roughly 150 times in excess.

Q And --

A Oh, no. Yeah, yeah, 4 to the 6, yeah, so 150 times in excess, I believe.

Q Okay. And obviously DeWayne Johnson eats food, correct?

A No, no, I'm wrong with 150. It's less than 100 times.

Q Okay.

A Slightly less than 100 times in excess.

Q And obviously DeWayne Johnson eats food, correct?

A I'm sorry?

Q Obviously DeWayne Johnson eats food, correct? That was a poor question. I'll strike that question.

DeWayne Johnson would have been exposed to glyphosate through his diet, correct?

MR. DHINDSA: Objection. Leading.

THE WITNESS: Yes, I can't ascertain what percent of his diet was glyphosate treated or GMO glyphosate food, but certainly some.

BY MR. TRAVERS:

Q And you didn't include that in your exposure assessment for DeWayne Johnson, as you testified earlier, correct?

MR. DHINDSA: Objection.

THE WITNESS: Correct.

BY MR. TRAVERS:

Q So would you say that -- so you would be underestimating DeWayne Johnson's risk in your report, right?

MR. DHINDSA: Objection. Leading.

THE WITNESS: Well, certainly additive to his occupational exposure.

BY MR. TRAVERS:

Q And attorneys for Monsanto were asking you about your Roundup use. Is there anything you do to minimize your exposure to glyphosate in diet?

A Oh, yes. My wife only buys organic. We never buy GMO food. She's very careful about that. I mean, there are times I probably do eat glyphosate in food when I go out. For example, lunch today here, I don't know where that bread came from, but yes.

Q With respect to your personal spraying of Roundup, how does your use of Roundup compare to DeWayne Johnson's?

MR. DHINDSA: Objection.

THE WITNESS: It would be a bread crumb on the floor of a big room. I have a yard which is completely mulch. And as I said, I have only used it once since the hurricane in September. And right now, I don't think there's hardly a weed in the yard. It's fairly clean.

BY MR. TRAVERS:

Q And you take these extra precautions in your use of Roundup and your dietary exposure because you're aware of a cancer risk with it, correct?

MR. DHINDSA: Objection.

expert report. Do you have that in front of you?

A I do.

Q Now, at page 110 of your expert report, underneath Table 12, you note that Dr. Portier, former director of the National Institute of Environmental Health Sciences, was a collaborator on IARC monographs, correct?

A Yes. He was an invited guest, yes.

Q You said collaborator in your report, correct?

A I did. But, more specifically, he was an invited expert. He was not a formal member of the board, and I didn't say that he was in my report.

Q All right. You talked about dietary risk as well, right?

A Yes.

Q And you said that one times 10 to the minus 6 is for a product that is not beneficial, right?

A Yes. That's a benchmark, yes.

Q And, thus, it's relevant to acceptable risk values whether a product is beneficial, right?

MR. TRAVERS: Objection. Asked and answered.

THE WITNESS: Yes, I already went through that.

BY MR. DHINDSA:

Q It's relevant to acceptable risk values whether a product is beneficial?

A Yes.

Q Now, you claim the average dietary risk for glyphosate is 1.5 times 10 to the minus 4, right, based on the DEEM model?

A At the high-end of the DEEM model, yes.

Q Isn't that based on the average in the DEEM model?

A No. It's based on the upper limit at .223.

Q If you look at page 146 of your expert report.

A Okay.

Q Do you see there where you have noted 1.5 times 10 to the minus 4 is for the average exposure based on the DEEM model?

A Yes, but it's still upper limit exposure, assuming a glyphosate diet with residues at the tolerance limit.

Q And that alleged dietary risk would exceed the recorded background risk of NHL in the SEER data you discussed yesterday of 1.3 times 10 to the minus 4, correct?

MR. TRAVERS: Objection. Form.

THE WITNESS: Can you repeat that, please?
BY MR. DHINDSA:
Q And that dietary risk would exceed the recorded background risk of NHL in the SEER data you discussed yesterday, right, the risk of 1.95 times 10 to the minus 4?
A I don't recall where the 1.95 times 10 to the minus 4 comes from. The background of his particular malignancy at his age is about 5.6 per million which is 5.6 times 10 to the minus 6.
Q In response to some questions from Mr. Travers, do you recall discussing Cosmo-Flux 411F?
A Yes.
Q That was in relation to the Paz-y-Mino study, right?
A Yes.
Q The authors describe that as a proprietary Columbian component probably included to aid in the inherent absorption of the herbicide, right?
A Yes.
Q Do you know the content of Cosmo-Flux 411F?
A No.
Q Do you know if it is recommended or permissibly used with Roundup Ultra?

EXHIBIT G

AFFIDAVIT OF EXPERT TOXICOLOGIST DR. WILLIAM R. SAWYER

STATE OF FLORIDA '

'

COUNTY OF LEE '

Before me, the undersigned notary, on this day personally appeared WILLIAM R. SAWYER, a person whose identity is known to me. After I administered an oath to him, upon his oath, he said:

A. Identification

Name and Purpose

1. My name is William R. Sawyer, Ph.D. I have been retained as an expert toxicologist by attorneys for the plaintiff, Dewayne Johnson, to review and assess the various facts in the case surrounding his use and exposure to glyphosate herbicide and his subsequent lymphoma diagnosis.

Qualifications and Training

2. I am a professional toxicologist with a doctorate in toxicology from the Indiana University School of Medicine. I earned an associate degree from the State University of New York Agricultural and Technical College at Morrisville in 1976. I earned a bachelor of science degree in biology from the State University of New York at Geneseo in 1978. I earned a master's degree in cellular and molecular biology, also from the State University of New York at Geneseo, in 1982. I subsequently earned a doctorate in toxicology from the Indiana University School of Medicine in 1988. This required three years of medical school curriculum with three years of course work in toxicology as well as training in the State Department of Toxicology and original, peer-reviewed and published toxicological research.

3. During my training at the Indiana University School of Medicine Department of Toxicology and Pharmacology, I studied under the late Robert B. Forney, Sr., Ph.D. Dr. Forney was the department chairman, the director of the State Department of Toxicology and one of the top researchers in his field and gained international recognition. I received considerable training with respect to toxic exposure evaluations of alcohol, numerous pharmaceuticals, petroleum and petroleum

took pains to point out this fact more than once in my report. Defendant elected to ignore them all.

45. Defendant's attorneys state "*Plaintiff is not claiming that dietary exposure caused his NHL and Dr. Sawyer claims to base his opinion solely on Plaintiff's occupational exposures. Nevertheless, Dr. Sawyer's cancer risk calculation for applicators includes dietary exposure. That exposure, though intended to apply to a man in his 40s, used modeling assumptions that included dietary intake of 1-2 year-old children and applicator modeling that far exceeds any reasonable dose Plaintiff received.*"

46. In this instance, defendant's attorneys are referencing Table 31 in my report. The complaint alleged by defendant is wholly unfounded as the occupational risk level is clearly marked in its own column without dietary risk added. The occupational cancer risk level derived from the Agricultural Health Study is displayed separately from the combined dietary and occupational exposure dose.

H. Background Non-Hodgkin's Lymphoma (NHL) Risks

47. Defense attorneys contend that "*actual occupational cancer risk was less than the background risk of NHL for African-American males of a similar age*," then further stated that I "agreed" that if a risk does not exceed the background rate of a cancer, it is not consider to be significant. This response taken from my deposition was deliberately framed to appear to support defendant's contentions. It was taken out of context, and there was no attempt to explain the actual comparison being made.

48. There are levels of risk that are considered acceptable for carcinogenic chemicals. For example, chloroform (an animal carcinogen/possible human carcinogen) is formed in drinking water when chlorine is added as a disinfectant. Thus, there is *consensus* that the benefit outweighs the calculated level of risk as the chlorine prevents fatal water-borne diseases. Regulatory agencies are in place to assess risk levels and maintain acceptable levels for the protection of human health of the general population. The US EPA uses a *de minimis* risk level of 1 in 1,000,000 person years (1×10^{-6}) for cancer as stated in their proposed rule:[38] "*EPA today proposes the human health criteria at a cancer risk level of 10^{-6} because such a risk level is conservative for the general population and in the generally applied risk range.* Higher risks such as for 1:100,000 person-years have been used as well. In this context, Non-Hodgkin's Lymphoma cancer risk among African American is 13

[38] US EPA, "40 CFR Part 131, Proposed Rules," 1991, Federal Register, Vol. 56 (223).