Independent Research & Further Reading

Guest: Gavin de Becker

Disclaimer 1: The sources presented here, directly (or as closely as possible), look at statements made by the guest in this episode. To report on each topic thoroughly, an extensive search and review (beyond the scope of this document) would be required.

Disclaimer 2: This podcast and its associated materials do not aim to substitute professional medical advice. For any medical concerns, it is essential to consult a qualified health professional.

Contents

Asbestos

> *“There are some examples of this in US history where it feels like after about 25 years, we'll start telling the truth about something. 50 years ago, Johnson and Johnson went to the FDA and they said, ‘Look, our baby powder, you know, that stuff that you put on the baby and you breathe and the mother breathes. Well, it's got asbestous in it and it causes cancer.’ And the FDA said, ‘Well, thanks for bringing this to our attention. We'll begin to study how much asbestous is an allowable amount.’ Now, they never considered zero, which is what I'd want on my baby or you'd want on your baby. And they began to study and then they studied for a while and they studied for a while and lo and behold 40 years had gone by and they hadn't come out with a ruling to say there shouldn't be any asbestous in Johnson and Johnson baby powder. When did they come out with that ruling by the way? Last year, end of 2024 after 52 years.”*

Asbestos was widely used from the late 19th century in insulation, shipbuilding, construction, and many industrial products, with almost no legal restrictions despite emerging medical reports of asbestosis and cancers from the 1920s onwards. Before the 1950s, most “regulation” consisted of limited workplace dust guidelines or factory rules in some industrialised countries, often non-binding and poorly enforced.

Johnson & Johnson’s Baby Powder

Johnson & Johnson’s talc-based baby powder has become a focal point in the broader story of asbestos hazards, corporate conduct, and regulation. Evidence spans decades of internal company knowledge, evolving testing standards, litigation, and ongoing scientific debate about cancer risks from low-level exposure. Investigative reporting and litigation documents show J&J executives discussed asbestos contamination risks in baby powder from at least the 1970s while publicly assuring regulators and consumers that tests found none. Internal studies and supplier data indicate asbestos was present in some cosmetic talc ores since the 1950s. Industry documents also show J&J and others promoting “no detectable asbestos” standards and pushing for less stringent FDA testing methods in the 1970s. J&J halted North American baby powder sales in 2020 and announced global discontinuation by 2023 amid mounting lawsuits and public scrutiny.

Regulatory & Legal Context

In the 1970s, FDA efforts to require talc to be >99.9% asbestos-free were weakened under industry pressure, which substituted “nondetected” for “asbestos-free” as a regulatory term. The US FDA later found chrysotile asbestos in a marketed baby powder lot, prompting a recall. J&J faces thousands of civil suits and a US Department of Justice criminal probe into whether asbestos risks were concealed. Courts have upheld multibillion-dollar verdicts, framing punitive damages as a response to failure to warn and ethical breaches rather than definitive causal proof in every case.

Health Risks from Asbestos-Contaminated Talc

Asbestos is a known carcinogen, strongly linked to mesothelioma and lung cancer, with no proven safe exposure level. A detailed case series of 10 women with serous ovarian cancer found talc and tremolite/anthophyllite asbestos in both J&J talc containers and ovarian tissues; modelled risks suggested a 2.3–31-fold increased ovarian cancer risk from long-term cosmetic talc use. Historical and epidemiologic data support asbestos–ovarian cancer associations, though some authors argue the causal inference strength and diagnostic misclassification issues warrant caution. Regulatory-style risk assessments assuming very low asbestos content (0.1%) in cosmetic talc estimate lifetime cancer risks within or below EPA’s “acceptable” range for typical consumer use, but these models rely on occupational cohorts and linear low-dose extrapolation with acknowledged uncertainty.

References 1-13.

Agent Orange

> *"Agent Orange the same story. Agent Orange material used in Vietnam for defoliation hurt people, killed people and caused birth defects in their kids including American soldiers, lots of them. The government knew it. They had tested it on 40 lab mice and lab mice don't have a good life generally anyway, they don't have good life expectancy, but in this case 38 died within 5 days. What did the government do with that information? Oh, put that in a top secret file and get rid of that. And then it sits for a long, long time and the Institute of Medicine says, 'Agent Orange hurting people? What are you talking about?' No. And they lie and they lie and they lie and then finally 20, 25 years later, okay, yeah, sorry, we were wrong. It does cause birth defects."*

2,3,7,8-TCDD: The Toxic Dioxin Contaminant in Agent Orange

As early as 1976, a 13-week rat study, showed clear dose-dependent systemic toxicity: at 1 µg/kg/day, rats developed mortality, weight loss, liver injury, thymic and lymphoid atrophy, porphyria and reproductive organ suppression; 0.01–0.001 µg/kg/day produced essentially no overt toxicity. From 1990 onwards, studies show that TCDD can increase infection-related mortality at very low doses and cause direct systemic lethality at higher doses, with susceptibility strongly influenced by immune responses, inflammatory mediators (e.g., TNF), and genetic modifiers of AhR signalling such as CYP1A1 and TIPARP.

Government and Legal Documents

- **Agent Orange Act of 1991** (Public Law 102-4) — the foundational legislation for veteran compensation - https://www.congress.gov/bill/102nd-congress/house-bill/556
- **PACT Act of 2022** (Sergeant First Class Heath Robinson Honoring our Promise to Address Comprehensive Toxics Act) — the most recent expansion - https://www.congress.gov/bill/117th-congress/house-bill/3967/text/ih
- **Operation Ranch Hand records** — declassified military documents on the spraying program
- **National Academy of Sciences / Institute of Medicine reports** — particularly the series "Veterans and Agent Orange" published starting in 1994, which reviewed the scientific evidence periodically
    - Original 1994 report: https://nap.nationalacademies.org/catalog/2141
    - Update 2002: https://nap.nationalacademies.org/catalog/10603

- Update 2006: https://nap.nationalacademies.org/catalog/11906
- Update 2012: https://nap.nationalacademies.org/catalog/18395
- Update 2014: https://nap.nationalacademies.org/catalog/21845
- Update 11 (2018 — most recent): https://nap.nationalacademies.org/catalog/25137
- Also freely available via NIH: https://www.ncbi.nlm.nih.gov/books/NBK535904/

Key Studies and Reports

- **Ranch Hand Study (Air Force Health Study)** — a long-running epidemiological study of veterans involved in the spraying operation; studies can be found on https://www.research.va.gov/events.cfm

References 14-22.

Silicone Breast Implants

> *"You see that same story with breast implants, silicone breast implants."*

In 1962, Cronin and Gerow introduced silicone gel implants, which quickly gained popularity for cosmetic augmentation and post-mastectomy reconstruction. Public concern over autoimmune disease and cancer led the US FDA to reclassify implants as high-risk, impose a 1992 moratorium on cosmetic silicone implants, and allow use mainly in reconstruction while demanding long-term safety studies. After extensive epidemiologic work, silicone gel implants were re-approved for general use in 2006, with ongoing post-approval surveillance requirements. Major reviews up to ~2016 often concluded no definitive proof of systemic disease, but emphasised inadequate adjustment and power, so moderate risks cannot be ruled out. Some more recent research suggests that silicone breast implants may stimulate the immune system in certain women who are genetically or immunologically predisposed, potentially contributing to symptoms sometimes called Breast Implant Illness (BII) or to autoimmune-type conditions (sometimes grouped under the term ASIA). While this link remains debated, safety concerns have led the FDA to add boxed warnings, require patient decision checklists, highlight the rare risk of BIA-ALCL (a lymphoma associated mainly with textured implants), and call for better long-term monitoring of implant outcomes.

Silicone breast implants are associated with two broad categories of health concerns: local/device-related problems and possible systemic effects. Local complications are common and include pain, infection, capsular contracture (tight, painful scarring around the implant), rupture, seroma (fluid collections), and the need for repeat operations; capsular contracture and rupture are among the most frequent long-term issues, especially as implants age. As previously mentioned, rare but serious cancer, breast implant-associated anaplastic large-cell lymphoma (BIA-ALCL), occurs mainly around textured implants and typically presents with late fluid collection or a mass near the implant capsule.

Systemic or whole-body concerns are more controversial. Many women report clusters of symptoms such as fatigue, joint and muscle pain, sleep disturbance, dry eyes/mouth, cognitive problems, and rashes, often grouped under “breast implant illness” (BII) or ASIA (autoimmune/inflammatory syndrome induced by adjuvants). Large epidemiologic studies show inconsistent results: some find higher rates of autoimmune or rheumatic conditions (for example, Sjögren’s syndrome, scleroderma, rheumatoid arthritis, sarcoidosis) in women with silicone implants, while others, especially in breast cancer reconstruction cohorts, do not find increased autoimmune disease or BII-type symptoms compared with similar women without implants. Several reviews conclude that evidence is suggestive but not definitive, with methodological limitations and potential confounding factors, so a moderate increase in risk cannot be ruled out.

Many patients with BII-like symptoms report partial or complete improvement after implant removal, which supports a causal role at least in a susceptible subgroup. Immunology studies show that silicone implants can trigger chronic local inflammation, T-cell and B-cell activation, and autoantibody formation, providing biologic plausibility for immune-mediated effects in some women. Overall, established risks include local complications and rare lymphoma, while systemic autoimmune or BII-type illness remains an area of active research and debate, with some signal of increased risk but no unanimous consensus.

References 23-46.

Arsenic in Baby Food

> *"You see that same story with baby formula, with baby food which has arsenic in it. I don't want any arsenic in baby food but deny, deny, deny, deny…"*

Most studies show that arsenic is commonly present in baby foods and infant formulas worldwide, especially in rice-based products, cereals, and mixed foods. Arsenic in these products is often in the more toxic inorganic form, and a substantial share of rice-based infant foods exceed international maximum levels, meaning they can contribute significantly to infant arsenic intake. Risk assessments in several countries (e.g., US, Saudi Arabia, Poland, Taiwan, Ghana) generally find that average or "typical" consumption patterns lead to low or acceptable non-cancer risk for most infants, but high intakes of rice products or certain formulas can push estimated exposures into ranges where non-cancer or lifetime cancer risks are of concern.

Early-life arsenic exposure is worrisome because infants are more vulnerable and because chronic exposure, even at relatively low doses, has been linked in broader epidemiologic literature to neurodevelopmental impairments (e.g., lower IQ), immune dysfunction, cardiovascular disease, and increased cancer risk later in life. Reviews emphasise that diet is a key exposure route in infancy, alongside drinking/cooking water, and that rice-based baby foods are consistently the largest dietary contributor of inorganic arsenic, prompting calls for stricter regulatory limits, better agricultural practices, and dietary diversification away from rice-heavy products to reduce exposure during this critical developmental window.

References 47-62.

Vioxx (rofecoxib)

> *"My god, 100,000 people dying from heart attacks from a pain pill, for example. Vioxx for God's sake. It's unbelievable and nobody gets in trouble, right? Companies are fined. Do you know what the fines mean to these companies?"*

Vioxx (rofecoxib) was a widely used painkiller that was withdrawn after being linked to substantially increased cardiovascular risk. Vioxx, a selective COX-2 inhibitor approved in 1999,

roughly doubled the risk of heart attack and stroke in major randomised trials such as VIGOR and APPROVe, with meta-analyses showing a myocardial infarction relative risk around 2.3 compared with placebo or other NSAIDs. On the basis of these trial-derived excess risks and large prescribing data, US estimates suggest Vioxx caused about 88,000–140,000 additional serious coronary events, many of them fatal, and a German modelling study estimated roughly 7,092 extra patients diseased or deceased from cardio- and cerebrovascular events between 2001 and 2004. Because individual causation cannot be assigned and many countries lack detailed data, there is no precise global death count; instead, there are consistent statistical estimates indicating that tens of thousands of excess heart attacks, strokes, and deaths were likely attributable to the drug worldwide.

References 63-70.

COVID-19 Vaccination

> *"And we'll see it with mass vaccination because after some years there will be, okay yes there is a good chance that it causes myocarditis, already been admitted by the way, pericarditis, cancer in young people. It was a bad product, sorry. But they won't do it a year away from a thing and they obviously as we can see every day they won't do it five years away."*

Myocarditis and Pericarditis

Overall, the evidence shows that COVID-19 mRNA vaccines can rarely cause myocarditis and pericarditis, with risk concentrated in males under about 40 years, especially adolescents and young adults, and typically within a week after the second dose. Large reviews and meta-analyses estimate myocarditis/pericarditis incidence after mRNA vaccination at roughly 2–20 per 100,000, or about 18–38 cases per million doses overall, with higher rates in young males, after mRNA (vs non-mRNA) vaccines, and after second rather than first or booster doses. Pericarditis alone is less well characterised but appears rarer than myocarditis, with pediatric pooled incidence around 0.74 per 100,000 (0.000074%) and more variable patterns of age, sex and hospitalisation than myocarditis.

Multiple cohort and self-controlled case series studies confirm an increased relative risk of myopericarditis in vaccinated versus unvaccinated people in the absence of infection (about two-fold overall), yet the absolute numbers remain very small. **Critically, SARS-CoV-2 infection itself raises myocarditis/pericarditis rates far more**, 15-fold or higher over pre-COVID baselines and several-fold

higher than after vaccination, with estimates of ~40 extra myocarditis cases per million after infection versus ~1–10 per million after vaccination.

Observational studies comparing infected, vaccinated, and background populations consistently find infection‑associated myopericarditis rates in the hundreds to thousands per 100,000, while vaccinated rates stay at a few to a few dozen per 100,000, and infection‑related cases tend to be more severe with higher mortality. Clinically, most vaccine‑associated myocarditis/pericarditis cases present with chest pain, elevated cardiac enzymes, and typical ECG/MRI findings; require short hospital stays, and resolve with NSAIDs, colchicine, or supportive care, although some patients show persistent imaging changes or symptoms at three months, and long‑term outcomes are still being studied.

Overall, the literature concludes that while a small, real risk of myocarditis/pericarditis exists after COVID‑19 vaccination, especially mRNA products in young males, the cardiac risk from COVID‑19 infection is substantially higher, and the benefit–risk balance strongly favours vaccination.

Across the papers referenced here, most explicitly state no conflicts of interest, but a few involve public or industry funding that readers should note. In COVID‑19 clinical trials generally, industry funding and disclosed conflicts have been statistically associated with more positive reported outcomes, highlighting why Conflicts of Interest declarations matter.

COVID-19 vaccination and Cancer Rates

The question of whether SARS‑CoV‑2 is an “oncogenic virus” remains speculative. Several reviews describe how viral proteins can interfere with tumour‑suppressor pathways, cell cycle control, inflammation, and DNA damage responses, suggesting a theoretical capacity to promote or accelerate cancer under certain conditions. However, the authors on these papers emphasise that direct, causal links between COVID‑19 infection and human cancers have not been demonstrated, and any potential effect is likely to be small, delayed, and highly context‑dependent. **Mechanistic and epidemiologic work is ongoing, but at present there is no clinical evidence of a surge of new cancers in youth attributable to SARS‑CoV‑2.**

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