

Negative Evidence: Examining the Concept of Chemtrails

Jane M. Orient, M.D.

Introduction

This article is part of the editorial series that examines controversial COVID-19 topics using the negative evidence method, which analyzes the absence of expected information as a potential clue of deliberate concealment of malfeasance.¹⁻¹⁴

The chemtrails theory is embraced by many members of the Make America Healthy Again (MAHA) movement and is a popular core belief of the modern Right-Wing movement.¹⁵ The transition of power from the Left to the Right following the 2024 election has put the supporters of the chemtrails theory, which began as obscure idea circulating within an internet niche, into a position of authority. Consequently, a large number of legislative measures and policies influenced by the chemtrails concept have been implemented.¹⁶ This astonishing success has been cheered by its proponents but also raised many concerns in the skeptical members of the Right Wing. This editorial aims to provide objective analysis of the claims and counterclaims associated with chemtrails and to examine the possible unintended consequences of chemtrails-related policies.

The Peril of Politicized Narratives

The meteoric ascension of the chemtrails perspective exemplifies both the immense power and serious risks associated with the recent proliferation of unproved politicized narratives—a pattern that recurs during times of instability and political turmoil.¹⁷ These may be embraced by Right-Wing politicians and influencers because of their perceived political advantages.¹⁷ This poses significant risks. Such narratives distract attention from known real problems and may unwittingly provide an advantage to political opponents. Emotionally charged concepts can be volatile and hence hard to control. They are usually short-lived and often backfire, sometimes leading to the collapse of entire political movements.

This recurring issue stems from cognitive biases and a tendency to forget about past negative consequences, as illustrated by Figure 1. Given today's circumstances, it is a moral duty to warn about the risks of popular narratives, despite the great difficulties and thanklessness of such a task.

Overview of the Chemtrails Narrative

Definition

It has been long recognized that the trails observed behind aircraft are caused by condensation. Such visual phenomena are called **contrails** (portmanteau of **"condensation"** and **trails**) and are a natural byproduct of jet engine combustion.¹⁸ When a jet

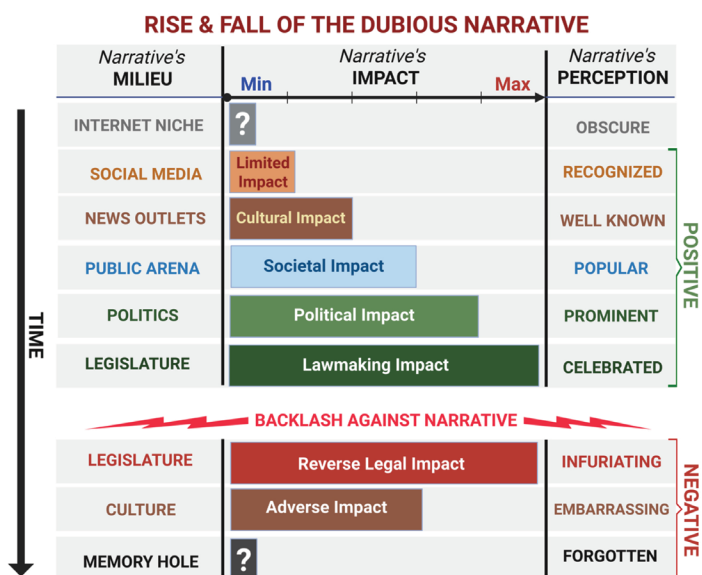


Figure 1. Rise and fall of a typical dubious narrative.
Credit: InfoHealer¹⁷

engine burns hydrocarbon fuel, it expels hot air rich in water vapor. At high altitudes, the ambient air is extremely cold (often below -40°C) and has very low vapor pressure. The introduction of the hot and moist exhaust causes the water vapor to rapidly condense into water droplets and then crystallize into ice, forming the visible, linear cloud.¹⁹ The science of contrail formation is neither new nor mysterious. In 1953, atmospheric scientist H. Appleman developed a chart that accurately predicts the conditions under which a jet aircraft will form a contrail.²⁰ This chart, still fundamental to aviation meteorology, shows that contrail formation is dependent on a specific combination of altitude (which corresponds to pressure) and the ambient air's temperature and humidity.

Chemtrails theory postulates that some of the observable aircraft's trails are not harmless contrails but result from deliberate, clandestine, and nefarious spraying of harmful chemical or biological agents. Chemtrails narrative propounds that various shadowy entities, including governmental agencies, create dangerous chemtrails as a part of secret large-scale atmospheric spraying programs (SLAP).²¹

Historical and Ideological Origins of the Chemtrails Narrative

At its onset the chemtrails theory was an obscure topic relevant to the niche of environmental activists. It seems that the pivotal catalyst for the theory's emergence was the 1996 research report "Weather as a Force Multiplier: Owning the Weather in 2025."^{22,23} The paper contained a clear disclaimer, stating that it was a speculative exercise exploring future possibilities and that it contained "fictional representations of future situations/scenarios."²² However, this disclaimer was ignored by proponents

of the chemtrail theory, who began circulating the document on internet forums as “a proof” that USAF was already engaged in a secret program of “spraying the U.S. population with mysterious substances.” Subsequent official denials of the chemtrail theory have paradoxically strengthened belief in this narrative, since denials were interpreted as further evidence of a cover-up.²⁴⁻²⁶ This dynamic created a closed epistemological loop where any attempt to refute the claims was simply absorbed into the narrative, making the theory highly resistant to refutation.

Three influencers are most frequently associated with bringing the chemtrail theory to a wider audience: radio host Art Bell, internet activist Richard Finke, and journalist William Thomas.²⁷ Initially skeptical, Thomas was reportedly convinced after viewing videos of aircraft leaving persistent parallel trails.²⁸ He began writing articles and speaking on Art Bell's late-night radio programs, lending the credibility of professional investigative journalism to the early claims of chemtrails while reaching an audience of millions.²⁷ Thomas's work culminated in the publication of his 2004 book, *Chemtrails Confirmed*.²⁹ The book's promotional material presents it as a “research record to verify what Airline Pilots, Police Officers, U.S. Marines, Air Traffic Controllers and Tanker Crews are reporting.”²⁹

A key strategy that enhanced the durability of the chemtrail narrative was its ability to anchor itself to real, documented historical events involving atmospheric modification, even if those events are unrelated to the theory's claims. By conflating these historical precedents with the proposed secret program, proponents created a mosaic of largely decontextualized facts that still appeared credible enough even to a skeptical audience. The argument follows a pattern: “If the government did *that* in the past, they are surely capable of doing *this* now.” The following is the brief description of the real events and programs that chemtrail theorists frequently quote:

- **Historical Weather Modification:** A frequently cited historical touchstone is the British cloud-seeding experiment known as Operation Cumulus conducted by the Royal Air Force in the 1950s.³⁰ This program involved dispersing substances like salt and silver iodide into clouds to induce rain. In August 1952, a period of intense experimentation coincided with catastrophic flash floods that devastated the village of Lynmouth, England, resulting in dozens of fatalities.³⁰ While a direct causal link was never definitively proven, the incident is often invoked by chemtrails proponents as evidence that government-led weather manipulation is not only possible but has a documented, deadly precedent.
- **Cold War Aerosol Tests:** Another set of historical events woven into the chemtrails narrative are declassified U.S. military programs from the Cold War era. One prominent example is Operation LAC (Large Area Coverage), conducted in the 1950s and 1960s.³¹ During these tests, the U.S. Army released the fluorescent compound zinc cadmium sulfide from aircraft and vehicles over numerous populated areas, including St. Louis and Minneapolis, to study how biological warfare agents might disperse.³¹ A 1997 report by the National Research Council, requested by Congress, concluded that the exposure levels were far below what would be considered harmful and found no evidence that they could cause illness.³¹ Nevertheless, the very existence of these secret tests, in which a substance was sprayed over unwitting citizens, is used by proponents of the chemtrails narrative as powerful evidence of the government's

willingness and capability to conduct the far larger and more nefarious program they allege is happening today.

- **Modern Cloud Seeding:** The most common and well-known type of conflation used by chemtrails-concept promoters involves the ongoing practice of cloud seeding.^{18,32,33} This weather modification technique typically involves dispersing substances like silver iodide or potassium iodide from aircraft or ground generators to encourage ice crystal formation within clouds, with the goal of increasing precipitation or suppressing hail. Cloud seeding is a regulated activity in several U.S. states, such as Texas and California, often for agricultural or water management purposes. While its effectiveness is still a subject of scientific debate and its use is limited, chemtrails believers do interpret the very existence of these open and regulated programs as direct evidence of the secret, global, malevolent program that involves high-altitude spraying. Interestingly, this conflation is so pervasive that recent state-level bills aiming to ban “chemtrails” have inadvertently threatened the legitimate cloud-seeding industry, forcing its lobbyists to seek specific exemptions.³⁴
- **Geoengineering.** The furor over chemtrails is inextricably linked to public concerns about the scientific field of geoengineering.³⁵ The term geoengineering refers to a science dealing with a range of large-scale technological interventions proposed to deliberately manipulate the Earth's climate system. Currently, geoengineering remains largely conceptual and has been reviewed briefly elsewhere.³⁶ Some Right-Wing internet influencers often conflate chemtrails-related claims with speculations about alleged and real ongoing geoengineering projects. They focus especially on the Solar Radiation Management (SRM) and Stratospheric Aerosol Injection (SAI) Programs.³⁶ SRM encompasses a set of approaches that aim to cool the Earth by reflecting a small percentage of incoming sunlight back into space.³⁷ The most-studied SRM method is Stratospheric Aerosol Injection (SAI). The concept of SAI is to mimic the cooling effect of large volcanic eruptions, which inject millions of tons of sulfur dioxide (SO₂) into the stratosphere.³⁸ Recently, the SRM-related Marine Cloud Brightening Program (Figure 2), led by the University of Washington, has received a lot of attention by chemtrails-theory supporters, in part due to the reports published in the Left-Wing journal *Politico*.³⁹⁻⁴³ This convoluted story has been recently examined elsewhere.⁴⁴ In brief, it proposes to artificially seed marine clouds with tiny aerosol particles in order to reflect more of the solar energy than natural clouds do. Here, Left-Wing climate-change activists have accidentally revealed their own hypocrisy. They have lashed out against scientists who suggested technological solutions eliminating the need for the despotic anti-global-warming policies they advocate. It seems that some chemtrails theorists mistook those Left-Wing attacks for the endorsement of their chemtrails narrative.⁴⁴
- **HAARP Program.** Many of chemtrails theorists invoke various research facilities like the High Frequency Active Auroral Research Program (HAARP) in Alaska as part of the alleged secret weather control network.⁴⁵ Recently, the Environmental Protection Agency (EPA) leadership appointed by the new administration made an effort to respectfully clarify the confusion related to those matters by publishing the

information page about chemtrails.^{26,46,47} Unfortunately, those sincere efforts have been largely misunderstood.²⁶



Figure 2. Marine Cloud Brightening Program (MCB)
Credit: InfoHealer⁴⁴

The fledgling concept of chemtrails was bipartisan since it was arising from a mix of Left-Wing environmental concerns and Right-Wing anti-government views, united by the nascent 1990s internet culture. However, over time, the chemtrails narrative has been increasingly adopted by many vocal Right-Wing influencers. In that process the chemtrails concept started to be re-framed with more focus on the Right Wing's preferred concerns such as population control, "culling the herd," mind-altering agents, and globalist cabals. Concurrently the Left Wing became strongly invested in the heavy promotion of the anthropogenic climate change theory. The chemtrails narrative did not fit into this new strategy, and mainstream Left-Wing-aligned scientists started to vigorously dismiss existence of chemtrails as "pseudoscience," "misinformation," and "conspiracy theory." In reaction, Right-Wing activists started to invoke chemtrails even more strongly to bolster their arguments against the agendas of man-made climate change and globalist population and perhaps even mind control promulgated by the Leftists.

Arguments Supporting the Chemtrails Narrative

The foundational claim of the chemtrails theory is that the alleged chemtrails can be visually distinguished from what proponents term "normal" contrails, which they believe should dissipate quickly.²⁸ This visual differentiation is the primary form of evidence cited by the believers. The key characteristics they identify as markers of a covert spraying operation include:

- **Longevity:** Trails that linger in the sky for many minutes, hours, or even for a half-day are considered to be "chemtrails" laden with chemical agents designed to persist for maximum effect.²⁸
- **Patterns:** Proponents argue that patterns described as crisscrossing lines, grids, or parallel stripes indicate an effort to achieve wide-area coverage over a target population.²⁸
- **Transformation:** Trails that do not remain as thin lines but

instead spread out, widen, and eventually merge to form hazy, cirrus-like clouds are believed to be a key feature of chemtrails. This "blooming" effect is interpreted as the chemical payload dispersing to form an artificial cloud cover for purposes like weather modification or blocking sunlight.²⁸

- **Post-1995 Change:** Another core tenet is the belief that the behavior of contrails fundamentally changed sometime around 1995. Proponents claim that before this time persistent trails were rare or non-existent, and their subsequent commonality is proof that a new program was initiated.²⁸

Alleged Purposes

The chemtrail theory is not monolithic, and its promoters offer a wide range of motives for the existence of those undisclosed projects. The most prominent explanations of the chemtrails' purposes can be categorized as follows:

- **Climate and Weather Manipulation** by stealthy geoengineering that includes two types of actions: [1] **Short-term manipulation of local weather** by manufacturing catastrophic events such as Hurricane Helene and the recent Texas floods,^{48,49} which according to chemtrails-theory proponents are historically unprecedented and hence "unnatural." The purported goals of such aberrant man-made cataclysms include: weakening political opponents by disrupting or terminating lives of their voters,⁴⁸ stealing the land and natural resources (e.g. lithium deposits),⁴⁸ or kidnapping children for the abuse by a "pedophilic cabal."⁵⁰ [2] **Long-term manipulation of climate patterns** mainly via solar radiation management (SRM) and cloud seedings in order to: execute pre-planned global agriculture control schemes,^{51,52} to scare people into compliance with the authoritarian policies proposed to combat man-made climate change;⁵⁴
- **Population Control**, possibly through **mass sterilization** via chemtrails containing infertility-inducing chemicals⁵⁵ or **mass poisoning** by release of toxic substances in order to "weed out" the sick, the elderly, or other "undesirables";⁵⁶
- **Mind Control and Psychological Manipulation** through psychoactive chemicals (e.g. lithium salts) designed to make the populace more docile, apathetic, and hence susceptible to government control;⁵⁷ and
- **Military and Industrial Goals** such as reckless testing of secret military weather weaponry using the unaware population as test subjects^{35,49} or a sinister scheme by pharmaceutical companies to make people sick, thereby increasing profits from medications, or a surreptitious way to vaccinate people against their will.^{58,59}

Scientific Concerns about the Chemtrails Narrative

The diversity of claims makes the chemtrails narrative appealing to individuals motivated by a variety of concerns. Those assertions resonate especially well with members of the Right-Wing movement, such as skepticism of government, distrust in academia, and hostility towards elites. These attitudes are understandable in the view of their experiences during COVID-19 pandemic. Moreover, even before COVID-19 many Right-Wing-affiliated individuals have been maltreated, injured economically, and persecuted by the Left-Wing-controlled establishment.

The biggest challenge for many Right-Wing-aligned individuals is to accept that the same officialdom experts who lied, endorsing dubious and agenda-driven COVID-19 narratives and anthropogenic climate change theory, can be correct in their criticism of chemtrails theory. They miss the point that the legal principle "*falsus in uno, falsus in omnibus*" (false in one thing, false in everything) that rules the courtroom is wrong in the real world. As the old adage states: *even a broken clock is right twice a day*. Very capable individuals can have compartmentalized blind spots or false beliefs. All those factors help explain the current popularity of the chemtrails narrative within Right-Wing camp.

However, the chemtrails narrative immediately triggers serious concerns in all individuals who possess basic scientific knowledge. Certainly, the government that ordered total lockdowns and mass implementation of experimental vaccine is capable of running a secret chemtrails program. However, the fact that it can does not mean that it does. The Deep State or similar entity can run hundreds of other nefarious programs, and no one will know about it, since the populace will be distracted by the chemtrails theory. Criticism of a popular Right-Wing narrative should not be misconstrued as the endorsement of the Left-Wing establishment and rejection of legitimate concerns about the existence of secret plots perpetuated by shadowy bad actors.

Criticisms of the chemtrails narrative are discussed below. It is very apparent that proponents lack classical definitive research from official sources (absence of evidence). Nor have they performed it themselves (negative evidence). Instead, they circulate what they claim is a "body of proof," which largely consists of the description of visual phenomena, decontextualized technical information, and anecdotal reports. This type of "evidence" can be easily questioned.

Critique of Presented Evidence

Beyond the core claims of persistence and patterns, promoters point to other visual cues as evidence, but all those cues have also been present in contrails.²⁸ For instance, the appearance of rainbow-like colors (iridescence) in a trail is cited as proof of its chemical nature. High concentrations of air traffic in a specific area are interpreted as a targeted spraying event rather than simple convergence of commercial flight paths in the era of robust air transport.²³

A significant portion of online purported evidence involves photographs and videos of legitimate aviation activities, frequently taken out of context. For example, photographs showing rows of large barrels inside an aircraft, presented as proof of a chemtrail plane's chemical dispersion system,²⁸ are standard ballast tanks used during the flight certification process for new aircraft types. They are filled with water, which can be pumped between the tanks to simulate the weight and shifting center of gravity of passengers and cargo, allowing engineers to test the plane's flight characteristics under various load conditions.^{28,60}

Videos of fuel dumping, required in various emergency situations, such as when an aircraft needs to return to the airport shortly after takeoff and is too heavy to land safely, have been falsely labeled as "chemtrail" spraying.⁶¹

The circulation of deliberately fabricated images further fuels the theory. A well-known example is a photoshopped image of an aircraft cockpit showing a panel with a clearly labeled "Chemtrails ON/OFF" switch, which is presented as real despite being a proven hoax.⁵³

Proponents often rely on personal experiences and citizen science to bolster their claims. While anecdotal evidence is very valuable—often the point of departure for systematic and rigorous research, no such research is to be found (negative evidence). To be fair, this situation was caused by the general aversion of the mainstream scientific community to engage in serious research that would directly address the purported anecdotal evidence. However, more recently the chemtrails theory has been engaged by official science.²⁵

It is common for believers to report a correlation between days of heavy "spraying" and the subsequent onset of flu-like symptoms, respiratory ailments, headaches, or other health issues in their community.^{62,63} These anecdotal connections are presented as firm evidence of the trails' toxicity rather than a trend or a "signal" worthy to be followed by systematic research methods. However, even that "signal" is very weak. The social media reports are rare and originate mainly from the chemtrails community believers. Others seem to be unaffected.

Flawed barium tests are one of the notable cases of flawed data collection by the supporters of the chemtrails narrative. A 2007 report from a Louisiana television station that was cited by Jim Marrs⁶³ claimed that air samples taken under "a grid of supposed chemtrails" contained unsafe levels of barium at 6.8 parts per million. However, a subsequent analysis of the news footage by experts revealed that the testing equipment had been misused, leading to a reading that was exaggerated by a factor of 100. The actual measured level of barium was both usual and safe.⁶³

Contrary to the claims of chemtrails and geoengineering proponents, the well-documented history of catastrophic weather events shows that such cataclysms are not new and are neither unnatural nor abnormal.⁶⁴ A simple record check reveals that Texas Camp Mystic was massively flooded multiple times in the past.⁶⁵ Massive apocalyptic floods left imprints on the history of humanity as reflected by numerous myths that are part of various ancient cultures,^{66,67} including the Biblical account of the Great Deluge also known as Noah's Flood (Genesis 6.9).⁶⁸ Earth's climate system is inherently dynamic and has always produced extreme weather events. Major floods, droughts, heat waves, blizzards, hurricanes, extreme cooling, and tornadoes have occurred throughout human history, long before modern aviation or geoengineering concepts.⁶⁹ The perception of more extreme events is also heightened by the 24/7 news cycle, social media, and more advanced monitoring, which make us more aware of occurrences worldwide. Simply, the chemtrails theory misattributes naturally occurring weather phenomena to a secret, malevolent human plot, rather than acknowledging the complex natural processes that always did genuinely influence weather patterns.

Physical Reasons Why Humans Cannot Control the Weather

The Energy or Mass of Dangerous Substances Required Far Exceed Human Capabilities. This is perhaps the most fundamental and irrefutable scientific argument against the chemtrail/geoengineering theory's premise of large-scale weather manipulation or the anthropogenic climate catastrophe.

The amount of energy involved in the creation of a severe event enormously exceeds the maximum power output that humans can conceivably deploy.⁷⁰⁻⁷² Similarly, human contributions to increases in atmospheric CO₂ are very small in the context of the natural CO₂ cycle.⁷³

The atmosphere contains about 780 Gt C; the surface ocean,

about 1,000 Gt C; vegetation, soils, and detritus, about 2,000 Gt C; and the intermediate and deep ocean, about 38,000 Gt C as CO₂ or CO₂ hydration products. Each year, the atmosphere and the surface ocean exchange about 90 Gt C. Human activity adds about 6.1 Gt C to the atmosphere each year.⁷³ The draconian measures required to eliminate this contribution would carry disastrous economic and social costs for dubious effect.⁷⁴ The magnitude of this human contribution is not compared with the magnitude of natural forces affecting climate, such as solar radiation and ocean currents.

A typical thunderstorm can release energy equivalent to several atomic bombs.⁷⁰ A hurricane releases colossal amounts of energy, with the latent heat released from condensation (cloud and rain formation) alone being equivalent to hundreds of times the world's electrical generating capacity.⁷⁶

As Figure 3 illustrates, it is perplexing that the same Right-Wing community that vigorously rejects the climate-change narrative accepts the notion that man can change the weather—as long as it involves elusive chemtrails and/or some sort of mysterious “weather machine.”^{45,75}

The complexity of atmospheric dynamics makes precise, large-scale manipulation incredibly difficult, if not impossible, with current technology. Weather systems are chaotic and interconnected; altering one part can have unpredictable and far-reaching consequences that are beyond any current computational or engineering capability to manage.

The dilution factor²⁵ is a core scientific challenge to the chemtrails theories that allege spraying toxins. A vast number of aircraft continuously spraying massive quantities of materials would be required. Even if possible, this could not be done clandestinely.

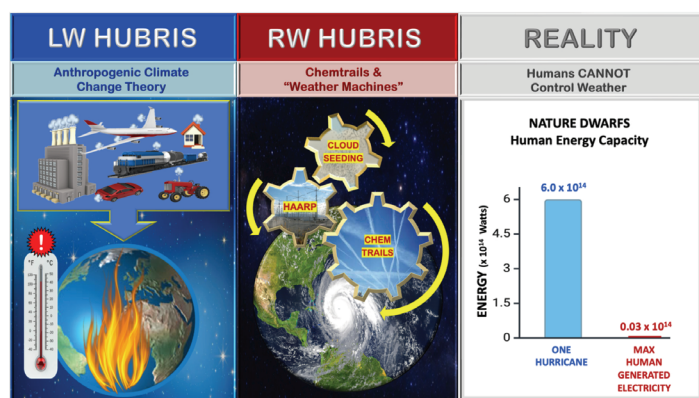


Figure 3. Human impact on the weather: Left-Wing and Right-Wing theories compared to reality

A Proposed Empirical Investigation into the Chemtrails Hypothesis

As a theoretical exercise, a proposal for an empirical study examining the validity of the chemtrails theory has been described.⁷⁷ The study would involve air and ground sampling to check for unusual chemicals, an analysis of flight records and inspection of aircraft for evidence of spraying, and modeling the logistics and feasibility of a large-scale operation. It would also compare any detected chemicals to toxicological standards and health records to assess potential impacts. The expected result is that no significant evidence supporting the chemtrails

theory would be found, reinforcing the scientific consensus that persistent contrails are normal and not part of a secret program.

Apparently, no similar study has been performed either by critics or proponents of the chemtrails theory. Mainstream scientists see no reason to spend money on a study, as the theory is obviously false based on facts and principles cited above, and there is absence of any evidence supporting it. But why do theory proponents not do or even demand performance of such studies? For proponents, the absence of such studies can be interpreted as actual negative evidence (lack of evidence that should be there).

Objective scientific truth still exists outside of biased partisan narratives, although it may not be accepted in the current era of rampant politicization of science and severe political polarization. Science is limited and cannot provide answers for all human dilemmas. It has failed spectacularly when both Left and Right Wing tried to use it to solve disputes that involved cultural and religious aspects. In contrast, the chemtrails debate is one of few hot politicized topics for which objective science is a perfect arbiter, as its central assertions lie in the realm of physics and chemistry. Naturally, the best science will not guarantee that its findings will be accepted by ideologically biased and emotional human beings.

Political Concerns

The most tangible political real-world impact of the chemtrails narrative, which was initially confined to the internet, has been a wave of state-level legislations and federal policies introduced in 2024 and 2025. These bills and policies often using broad language, aim to prohibit chemtrails, geoengineering, and other forms of human-enacted weather modification.^{26,34,78,79} Some Right-Wing politicians claimed that the purpose of those bills is to separate fact from fiction and not to promote internet myths.⁷⁹ However, they clearly take the existence of chemtrails for granted and are not calling for investigating them.

The legislative pipeline from politically attractive but scientifically unsubstantiated concept to policy highlights the dynamic of good intentions that can bring results opposite to the desired ones. The process began with the online circulation of the presumably well-intended chemtrails narrative, which became conflated with the scientific field of geoengineering. Right-Wing lawmakers, responding to a vocal constituency, then drafted legislation that has passed. The broad and sweeping language of the bills lumped together the uncertain chemtrails program, legitimate (though controversial) geoengineering research, and established commercial practices like cloud seeding.^{32,33} However, a not immediately visible result may be the inadvertent endorsement of the anthropogenic climate-change narrative, with its perilous attack on civil liberties and measures such as restrictions on commercial air travel.

The laws present practical challenges as well. How much law enforcement has to be diverted to monitor the skies to attempt to enforce those new rules? How are the police trained and equipped to assess claimed occurrences and to react to them? How will attempts to blame elusive shadowy actors detract from denouncing obvious government carelessness that permits building in the flood plain and neglects to install warning sirens?

In addition, those well-meaning bills may result in witch

hunts affecting innocent individuals instead of targeting some monstrous globalist conspirators. This has happened before.⁸⁰

Weather disasters have occurred throughout history and have caused terrible human suffering, with crop failures and starvation. The worst period in Europe was the Little Ice Age, from 1550–1700 A.D. In 1626, one storm dropped 1 meter of hail. Grapes in vineyards exploded, rivers froze, and crops were destroyed. Weather this bad was unprecedented, and thus people thought it could not have been natural. Hence, it must have been unnatural, and in a superstitious age was attributed to sorcery. Witches had long been known to engage in weather cooking, as in *Macbeth*: “I’ll give thee a wind.... Though his bark cannot be lost,/ Yet it shall be tempest-toss’d” (William Shakespeare, *Macbeth*, Act 1, Scene 3).

As a precaution against future disaster, witches had to be found and punished, in a campaign led by the most highly educated members of society. Skeptical voices had to be silenced.⁸¹ In some regions, legal executions for witchcraft claimed more than one in 1,000 persons. Perhaps surprisingly, the fewest number were executed in Spain (fewer than one in 10,000).⁸² The turning point in Spain was the insistence of Inquisitor Alonso de Salazar Frías on credible evidence and the rejection of confessions under torture.⁸³ Salazar’s rules of evidence recognized the perverse and essentially meaningless forms that unstructured “facts” could take—a reform that still has not happened in major streams of the contemporary risk debate.⁸⁰

These events have been reflected in literature. In Mark Twain’s *The Prince and the Pauper*, there’s a memorable incident in which a woman was accused of being a weather-controlling witch and faced death by burning.⁸⁴ The imposter prince sought evidence, arguing that if she truly wielded supernatural powers, she should be able to cause another storm on command. He offered to spare her life and even to give her great wealth if she could cause a storm or an earthquake. Naturally, she failed that test, proving she was not a witch, and he let her go free. Twain uses this scene to satirize the absurdity of mob mentality and the dangers of unchecked belief systems. Today’s accused culprits would not be offered such a test. Today, extreme weather events are deemed to be “unprecedented” and hence unnatural because historical memories are so short. But instead of superstitiously blaming witches practicing sorcery, some blame secret technology that defies laws of physics, practiced by an evil cabal.

While witchcraft will not be invoked, many innocents may be subjected to the devastating lawfare. The disturbing pattern that has been used by the Left Wing may be followed now by the Right Wing. We have witnessed a growing trend of climate-related litigation promoted by Left-Wing-aligned entities aimed at “holding fossil fuel companies accountable for their contributions to climate change.” The \$51 billion lawsuit by an Oregon county against fossil fuel companies’ failure to warn about their products is an example of such lawfare.⁸⁵ The same tactics might used by the chemtrails theorists, supported by the new laws, to target alleged malefactors.

Another political concern is whether it is prudent for politicians to exploit unproven yet popular theories for political advantage. Such approach can certainly bring instant political victories, but how long would they last? At the time of writing this editorial, a major unprecedented conflict erupted between the politicians and their constituency precisely because of such a scenario.^{86,87} The adoption of popular concepts with very shaky foundations,

such as transgenderism and critical race theory is becoming a political liability for the Left.

Conclusions

The chemtrails narrative has progressed from internet folklore to a potent political force. Much of the energy from the Make America Healthy Again (MAHA) movement is now diverted from initial concerns about government COVID policy, COVID vaccine dangers, and public health dogma on other vaccines, to worries about poisoning and weather manipulation by a secret cabal.

Both Left-Wing and Right-Wing activists assert that there is an existential threat to humanity from evil perpetrators. The Left-Wing climate-change alarmists point to greedy capitalists who profit from the fuels and technology that are essential for our health and prosperity. Many of the generally Right-Wing activists are focusing on alleged extensive poisoning and weather modification by unknown cabalists. Despite the absence of a sound scientific basis for either of the claims, the seriousness of the threats is said to call for urgent draconian measures as a “precaution.”

The abandonment of sound scientific principles spells destruction for a civilization that depends on science and technology for survival. It is disturbing for both sides of the political aisle to embrace narratives that are almost certainly false and definitely poorly founded. Political gains will be short-lived. Societal consequences may be irreversible.

It is our duty as physicians and scientists to insist on rules of evidence and real-world, objective verification of theory, regardless of potential cost to our career.

Jane M. Orient, M.D., is a practicing general internist and serves as executive director of AAPS and managing editor of the Journal. Contact: jane@aapsonline.org.

REFERENCES

1. Orient JM. Negative evidence: repurposed drugs for COVID-19: the partisan bone of contention. Part II. *J Am Phys Surg* 2011;29:66-72.
2. Orient JM. Negative evidence: repurposed drugs for COVID-19: the partisan bone of contention. Part I. *J Am Phys Surg* 2024;29:34-46.
3. Orient JM. Negative evidence: the Gordian knot of the dispute on the origin of SARS-CoV-2. *J Am Phys Surg* 2024;29:2-10.
4. Orient JM. Negative evidence: COVID-19 vaccines and neurological disorders. *J Am Phys Surg* 2023;28:74-80.
5. Orient JM. Negative evidence: COVID-19 vaccines and sudden deaths. *J Am Phys Surg* 2023;28:38-47.
6. Orient JM. Negative evidence: COVID-19 vaccines and cancer. *J Am Phys Surg* 2023;28:2-10.
7. Orient JM. Negative evidence: COVID-19 vaccines and disorders of hemostasis. *J Am Phys Surg* 2022;27:98-107.
8. Orient JM. Negative evidence: COVID-19 vaccines and fertility. *J Am Phys Surg* 2022;27:69-77.
9. Orient JM. Negative evidence: postmortem examinations of post-COVID-19 vaccine fatalities. *J Am Phys Surg* 2022;27:35-41.
10. Orient JM. Negative evidence: antibody dependent enhancement. *J Am Phys Surg* 2022;27:2-6.
11. Orient JM. Negative evidence: non-pharmaceutical interventions during COVID-19 pandemic. A tale of authoritarian overreach. *J Am Phys Surg* 2024;29:98-110.
12. Orient JM. Negative evidence: the substance and circumstances of COVID-19 vaccine and mental health. *J Am Phys Surg* 2025;30:2-12.
13. Orient JM. Negative evidence: COVID-19 vaccine and the endocrine system. *J Am Phys Surg* 2025;30:34-40.
14. Orient JM. Beyond negative evidence: lessons from the disputes on DNA contamination of COVID-19 vaccines. *J Am Phys Surg* 2023;28:106-112.
15. Asmelash L. Chemtrails are one of the most popular conspiracy theories. KTVZ News; Mar 12, 2024. Available at: <https://ktvz.com/news/national-world/cnn-national/2024/03/12/chemtrails-are-one-of-the-most-popular-conspiracy-theories-heres-what-it-means/>. Accessed Jul 19, 2025.

16. Buck J. Understanding and addressing “chemtrails.” Harvard Climate Blog; Jun 25, 2025. Available at: <https://salatainstitute.harvard.edu/understanding-and-addressing-chemtrails/>. Accessed Jul 19, 2025.
17. InfoHealer. Realistic and dubious political narratives. Information Heals. Substack; Jul 31, 2025. Available at: <https://neutralresearcher.substack.com/p/realistic-and-dubious-political-narratives>. Accessed Jul 30, 2025.
18. Bueso MJ, Villa MC, González DP. Aircraft clouds: from chemtrail pseudoscience to the science of contrails. *Metode* 2018;2018(8):81-187. doi:10.7203/METODE.8.9954.
19. Jansen J, Heymsfield AJ. Microphysics of aerodynamic contrail formation processes. *J Atmos Sci* 2015;72(9):3293-3308. doi:10.1175/JAS-D-14-0362.1.
20. National Aeronautics and Space Administration. Airspace: Contrails. NASA: Aeronautic Research Mission Directorate; December 2010. Available at: <https://www.nasa.gov/wp-content/uploads/2023/06/contrails-k-12.pdf>. Accessed Jul 21, 2025.
21. Shearer C, West M, Caldeira K, Davis SJ. Quantifying expert consensus against the existence of a secret, large-scale atmospheric spraying program. *Environ Res Lett* 2016;11(8):084011. doi:10.1088/1748-9326/11/8/084011.
22. House T, Near J, Shields W, Celentano R, Husband D. *Weather as a Force Multiplier: Owning the Weather* in 2025. Research Report. Defense Technical Information Center; 1996. Available at: <https://apps.dtic.mil/sti/citations/ADA333462>. Accessed Jul 21, 2025.
23. Spencer R. Chemtrails or Contrails? CO2 Coalition; May 1, 2025. Available at: <https://co2coalition.org/publications/chemtrails-or-contrails/>. Accessed Jul 21, 2025.
24. USAF. The “chemtrail” hoax. Air Force Link. Available at: https://web.archive.org/web/20021202230839/http://www.af.mil/environment/contrails_chemtrail.shtml. Accessed Jul 21, 2025.
25. Shearer C, West M, Caldeira K, Davis SJ. Quantifying expert consensus against the existence of a secret, large-scale atmospheric spraying program. *Environ Res Lett* 2016;11(8):084011. doi:10.1088/1748-9326/11/8/084011.
26. Klee M. Trump’s EPA chief tried to debunk chemtrails, but nobody actually read the report. *Rolling Stone*, Jul 10, 2025. Available at: <https://www.rollingstone.com/politics/politics-news/chemtrail-conspiracy-theory-epa-lee-zeldin-1235382905/>. Accessed Jul 19, 2025.
27. Reynolds J. Those mysterious lines in the sky. *Veritas* 1999;(21). Available at: <https://web.archive.org/web/20000817072216/http://www.fortunecity.com/greenfield/swallowtail/619/linesinsky.html>. Accessed Jul 21, 2025.
28. HandWiki. Chemtrail conspiracy theory. *Scholarly Community Encyclopedia*; Oct 31, 2022. Available at: https://encyclopedia.pub/entry/32127#ref_26. Accessed Jul 21, 2025.
29. Thomas W. *Chemtrails Confirmed*. Bridger House; 2004. Available at: https://www.thriftbooks.com/w/chemtrails-confirmed_william-thomas/1186885/#edition=5295090&idq=10106680. Accessed Jul 21, 2025.
30. Borowski. S. Despite past failures, weather modification endures. American Association for the Advancement of Science (AAAS); Dec 31, 2012. Available at: <https://www.aaas.org/taxonomy/term/10/despite-past-failures-weather-modification-endures>. Accessed Jul 21, 2025.
31. National Research Council (U.S.) Subcommittee on Zinc Cadmium. *Toxicologic Assessment of the Army’s Zinc Cadmium Sulfide Dispersion Tests*. National Academies Press (U.S.); 1997. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK233506/>. Accessed Jul 21, 2025.
32. GAO. Cloud Seeding Technology: Assessing Effectiveness and Other Challenges. U.S. Government Accountability Office; Dec 19, 2024. Available at: <https://www.gao.gov/products/gao-25-107328>. Accessed Jul 21, 2025.
33. Al Hosari T, Al Mandous A, Wehbe Y, et al. The UAE cloud seeding program: a statistical and physical evaluation. *Atmosphere* 2021;12(8):1013. doi:10.3390/ATMOS12081013.
34. Associated Press. Unsubstantiated “chemtrail” conspiracy theories lead to legislation proposed in Louisiana, other US states. WRKF Public Radio; Jun 9, 2025. Available at: <https://www.wrkf.org/politics/2025-06-09/unsubstantiated-chemtrail-conspiracy-theories-lead-to-legislation-proposed-in-louisiana-other-us-states>. Accessed Jul 21, 2025.
35. Shanahan N. Geoengineering: Who’s behind it and how we stop it. *The Dark MAHA Report*; Jul 10, 2025. Available at: <https://expose-news.com/wp-content/uploads/2025/07/Geoengineering-Whos-Behind-It-and-How-We-Stop-It-Nicole-Shanahan.pdf>. Accessed Jul 16, 2025.
36. InfoHealer. Geoengineering. A brief description. Information Heals. Substack; Jul 30, 2025. Available at: <https://neutralresearcher.substack.com/p/geoengineering>. Accessed Jul 30, 2025.
37. Felgenhauer T, Pizer W. The future of solar geoengineering research. *Resources*; Jan 17, 2024. Available at: <https://www.resources.org/common-resources/the-future-of-solar-geoengineering-research/>. Accessed Jul 19, 2025.
38. Crutzen PJ. Albedo enhancement by stratospheric sulfur injections: a contribution to resolve a policy dilemma? *Clim Change* 2006;77(3-4):211-220. doi:10.1007/S10584-006-9101-Y/METRICS.
39. Jones J. Organizers of major sun-dimming experiment collaborated with the federal government: documents. *Western J*; Jul 28, 2025. Available at: <https://www.westernjournal.com/organizers-major-sun-dimming-experiment-collaborated-federal-government-documents/>. Accessed Jul 31, 2025.
40. Childers J. BUTTERFLIES. C&C News. Coffee & COVID 2025. Substack; Jul 30, 2025. Available at: <https://www.coffeeandcovid.com/p/butterflies-wednesday-july-30-2025>. Accessed Jul 31, 2025.
41. Hear C. Researchers quietly planned a test to dim sunlight. They wanted to ‘avoid scaring’ the public. *Politico*; Jul 27, 2025. Available at: <https://www.politico.com/news/2025/07/27/california-sunlight-dimming-experiment-collapse-00476983>. Accessed Jul 31, 2025.
42. Nieves A, Kaenel C. Alameda was just the tip (of the geoengineering iceberg). *Politico*; Jul 28, 2025. Available at: <https://www.politico.com/newsletters/california-climate/2025/07/28/alameda-was-just-the-tip-of-the-geoengineering-iceberg-00480901>. Accessed Jul 31, 2025.
43. Richards H. The sticky study of sunblocking a warming planet. *Politico*; Jul 28, 2025. Available at: <https://www.politico.com/newsletters/power-switch/2025/07/28/the-sticky-study-of-sunblocking-a-warming-planet-00479615>. Accessed Jul 31, 2025.
44. InfoHealer. Marine cloud brightening controversy. Information Heals. Substack; Aug 3, 2025. Available at: <https://neutralresearcher.substack.com/p/marine-cloud-brightening-controversy>. Accessed Aug 2, 2025.
45. Bell S. Nearly three decades on, the chemtrail-HAARP geoengineering conspiracy theory remains popular despite lack of evidence and no scientific basis. *Science Feedback*; Aug 31, 2023. Available at: <https://science.feedback.org/review/three-decades-chemtrail-haarp-geoengineering-conspiracy-theory-remains-popular-despite-lack-evidence-no-scientific-basis/>. Accessed Jul 19, 2025.
46. EPA. Information on Contrails from Aircraft. U.S. Environmental Protection Agency; Jul 10, 2025. Available at: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/Contrails>. Accessed Jul 19, 2025.
47. Frozen R. EPA addresses contrails conspiracy theories. *The Hill*, Jul 10, 2025. Available at: <https://thehill.com/policy/energy-environment/5395109-epa-zeldin-contrails-chemtrails-geoengineering-rfk-jr-conspiracy-theory/>. Accessed Jul 19, 2025.
48. Ferris L. Hurricane Helene conspiracy theories about lithium mining, weather control spread widely. CBS News; Oct 7, 2024. Available at: <https://www.cbsnews.com/news/hurricane-helene-conspiracy-theories-lithium-mining-weather-control-fact-check/>. Accessed Jul 16, 2025.
49. The Truth about Cancer. The Texas floods: “natural disaster” or engineered? The Truth about Cancer. Substack; Jul 13, 2025. Available at: <https://thetruthaboutcancerofficial.substack.com/p/the-texas-floods-natural-disaster>. Accessed Jul 16, 2025.
50. Society of Native Nations. Perma Record of video claiming that over 1,000 children missing after Maui Fire. Instagram Post; Sep 14, 2023. Available at: <https://perma.cc/SE5U-9P6V>. Accessed Jul 16, 2025.
51. Kravitz B. Effects of climate engineering on agriculture. *Nat Food* 2021;2(5):320-321. doi:10.1038/s43016-021-00277-x.
52. Kortetmäki T, Oksanen M. Right to food and geoengineering. *J Agric Environ Ethics* 2023;36(1):1-17. doi:10.1007/S10806-023-09898-7/METRICS.
53. NHDES. ARD-69: Chemtrails and contrails. Environmental Fact Sheet. New Hampshire Department of Environmental Science; 2024. Available at: <https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/ard-69.pdf>. Accessed Jul 17, 2025.
54. CFC. Posts falsely claim climate change is a scam created by using “chemtrails.” Climate Fact Checks; 2024. Available at: <https://climatefactchecks.org/posts-falsely-claim-climate-change-is-a-scam-created-using-chemtrails/>. Accessed Jul 19, 2025.
55. Hasslberger S. Are chemtrails a major cause of infertility? Health Supreme Blog; Jul 24, 2024. Available at: http://www.newmediaexplorer.org/sepp/2010/07/24/are_chemtrails_a_major_cause_of_infertility_health_supreme_newsgrabs_saturday_24_july_2010.htm. Accessed Jul 19, 2025.
56. Tingley D, Wagner G. Solar geoengineering and the chemtrails conspiracy on social media. *Palgrave Communications* 2017;3(1):1-7. doi:10.1057/s41599-017-0014-3.
57. Sarich C. NASA ADMITS to spraying Americans with lithium & other chemicals. Sheep Media; Nov 14, 2017. Available at: <https://web.archive.org/web/20180326205954/http://asheepnomore.net/2017/11/14/nasa-admits-to-spraying-americans-with-lithium-other-chemicals/>. Accessed Jul 19, 2025.
58. Austin J. CHEMTRAIL FLU: Doctor’s shock claim planes make us sick so medical firms can cash in. *Express*; Jun 29, 2016. Available at: <https://www.express.co.uk/news/weird/684587/CHEMTRAIL-FLU-Doctor-s-shock-claim-planes-make-us-sick-so-medical-firms-can-cash-in>. Accessed Jul 19, 2025.

59. RMIT ABC. Are chemtrails being used to vaccinate Australians secretly against COVID-19? ABC News Australia; Feb 9, 2023. Available at: <https://www.abc.net.au/news/2023-02-10/fact-check-covid19-vaccines-chemtrails/101950574>. Accessed Jul 19, 2025.
60. Haenggi M. *Boeing Widebodies*. Zenith Imprint; 2003. Available at: https://books.google.com/books?id=OEniu9ff_sC&hl=en. Accessed Jul 21, 2025.
61. Allen M. The man who tricked chemtrails conspiracy theorists. *Vice*; Oct 13, 2014. Available at: <https://www.vice.com/en/article/i-tricked-chemtrail-conspiracy-theorists-947/>. Accessed Jul 21, 2025.
62. McGrath J, Perritano J. What is the chemtrails conspiracy theory? HowStuffWorks; Nov 2, 2024. Available at: <https://science.howstuffworks.com/transport/flight/modern/what-are-chemtrails.htm>. Accessed Jul 19, 2025.
63. Radford B. Curious contrails: death from the sky? *Skeptical Inquirer* 2009;33(2). Available at: <https://skepticalinquirer.org/2009/03/curious-contrails-death-from-the-sky/>. Accessed Jul 21, 2025.
64. Blake ES, Landsea CW, Miami N, Gibney EJ. The deadliest, costliest, and most intense United States tropical cyclones from 1851 to 2010 (and other frequently requested hurricane facts). ResearchGate; January 2007. Available at: https://www.researchgate.net/publication/237806994_The_Deadliest_Costliest_and_Most_Intense_United_States_Tropical_Cyclones_From_1851_to_2006_and_Other_Frequently_Requested_Hurricane_Facts. Accessed Jul 19, 2025.
65. Baker M. Evacuations and lost cabins: a century of floods at Camp Mystic. Texas floods often threatened Camp Mystic. *NY Times*; Jul 11, 2025. Available at: <https://web.archive.org/web/20250712000229/https://www.nytimes.com/2025/07/11/us/camp-mystic-flood-history.html>. Accessed Jul 19, 2025.
66. Withington J. *Flood. Nature and Culture*. Reaktion Books; 2013. Available at: <https://www.google.com/books/edition/Flood/4R9WAgAAQBAJ?hl=en&bpv=0>. Accessed Jul 19, 2025.
67. Huaranga RF. Symbolism in Flood Myths around the World: A Comparison of Universal Values and Human Nature in Different Cultures. Los Angeles City College; 2014. Available at: https://thinkyou.bayhonors.org/wp-content/uploads/BHS_Papers/2014_Symposium/RocioFlores_HuarangaSymbolismInFloodMythsAroundTheWorld.pdf. Accessed Jul 19, 2025.
68. Longman T III, Walton JH, Moshier SO. *The Lost World of the Flood: Mythology, Theology, and the Deluge Debate*. IVP Academic; 2018.
69. Behringer W. Climatic change and witch-hunting: The impact of the Little Ice Age on mentalities. *Clim Change* 1999;43(1):335-351. doi:10.1023/A:1005554519604/METRICS.
70. Pearson EF. Hurricane Ike versus an atomic bomb. *J Chem Educ* 2013;90(1):90-92. doi:10.1021/ED2007125/ASSET/IMAGES/MEDIUM/ED-2011-007125_0001.GIF.
71. Hariharan B, Chandra A, Dugad SR, et al. Measurement of the electrical properties of a thundercloud through muon imaging by the GRAPES-3 experiment. *Phys Rev Lett* 2019;122(10):105101. doi:10.1103/PHYSREVLETT.122.105101/FIGURES/7/THUMBNAI.
72. Bhaura V. Lightning harvesting. An average thunderstorm can power 200,000 homes. Medium: Science Junction; Jan 14, 2022. Available at: <https://medium.com/science-junction/lightning-harvesting-1409ee750bcf>. Accessed Jul 19, 2025.
73. Orient JM. The physician and "climate change." *J Am Phys Surg* 2019;24:101-105.
74. Adler JH. Taking property rights seriously: the case of climate change. Case Western Reserve University Faculty Publications; 2009. doi:10.1017/S0265052509090256. Available at: https://scholarlycommons.law.case.edu/cgi/viewcontent.cgi?article=1029&context=faculty_publications. Accessed Aug 9, 2025.
75. Tyson A, Funk C, Kennedy B. What the data says about Americans' views of climate change. Pew Research Center; Aug 9, 2023. Available at: <https://www.pewresearch.org/short-reads/2023/08/09/what-the-data-says-about-americans-views-of-climate-change/>. Accessed Jul 19, 2025.
76. Energi Staff. NOAA: How much energy does a hurricane release? EnergiMedia; Sep 17, 2018. Available at: <https://energi.media/news/noaa-how-much-energy-does-a-hurricane-release/>. Accessed Jul 21, 2025.
77. InfoHealer. A proposed multi-faceted empirical investigation into the "chemtrails" hypothesis. Information Heals. Substack; Jul 30, 2025. Available at: <https://neutralresearcher.substack.com/p/a-proposed-multi-faceted-empirical>. Accessed Jul 29, 2025.
78. Plummer K. Map shows states trying to ban "chemtrails." *Newsweek*; Jun 3, 2025. Available at: <https://www.newsweek.com/chemtrails-legislation-us-map-2079810>. Accessed Jul 21, 2025.
79. Russon G. Gov. DeSantis signs controversial "chemtrails" legislation. Florida Politics; Jun 20, 2025. Available at: <https://floridapolitics.com/archives/744489-gov-desantis-signs-controversial-chemtrails-legislation/>. Accessed Jul 21, 2025.
80. Clark WC. Witches, floods, and wonder drugs: historical perspectives on risk management. IIASA Professional Paper; 1980. Available at: <http://pure.iasa.ac.at/1523/>. Accessed Jul 30, 2025.
81. Baliunas S. Dr. Baliunas on weather cooking. Independent Institute; 2008. Available at: <https://www.youtube.com/watch?v=wcAy4sOc5SM&t=24s>. Accessed Aug 6, 2025.
82. Baliunas S. Witches, whisky, and bad weather. Doctors for Disaster Preparedness; Jul 16, 2005. Available at: <https://www.ddponline.org/baliunas/>. Accessed Aug 6, 2025.
83. Miesel S. The inquisitor who wouldn't burn witches. *Catholic World Report*; Oct 28, 2023. Available at: <https://www.catholicworldreport.com/2023/10/28/the-inquisitor-who-wouldnt-burn-witches/>. Accessed Aug 6, 2025.
84. Twain M. *The Prince and the Pauper*. Union Square & Co.; 2024.
85. Associated Press. Oregon county sues oil, coal companies for \$51 billion over deadly heat dome. AP News; Jun 23, 2023. Available at: <https://apnews.com/article/heat-dome-oregon-fossil-fuel-lawsuit-879616867ad9b6468c38b5129905a350>. Accessed Aug 6, 2025.
86. Gardner A. MAGA fury over Epstein files opens rare fracture with Trump. Bloomberg; Jul 18, 2025. Available at: <https://www.bloomberg.com/news/newsletters/2025-07-18/maga-fury-over-epstein-files-opens-rare-fracture-with-trump>. Accessed Jul 19, 2025.
87. Donegan M. Trump's endless toying with conspiracy theories has finally come back to bite him. *Guardian*; Jul 18, 2025. Available at: <https://www.theguardian.com/commentisfree/2025/jul/18/trump-conspiracy-theories-epstein>. Accessed Jul 19, 2025.

LIMITED TIME OFFER *Common Sense Medicine*

Bulk discounts on powerful new book to empower patients.

Hot off the press, is a powerful, easy-to-read, and entertaining exposé of the root problems plaguing American medicine and the simple solutions!

Buy copies to put in your waiting room!

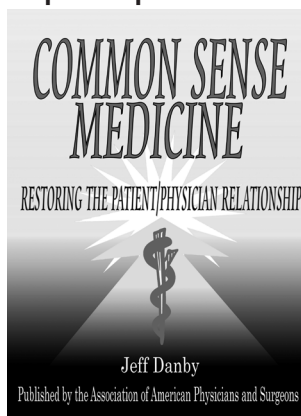
1 to 24 copies: \$3/book

BEST DEAL:

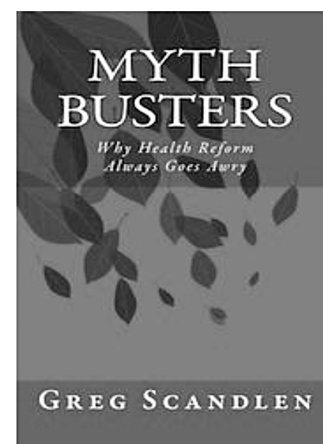
buy 25 or more for \$1 each.

order online at

<http://aapsonline.org/bookdeal>



Common Sense Medicine is written by award-winning author, Jeff Danby.



Available on Amazon and Kindle