

September 7, 2021

Andy Jassy
Chef Executive Officer
Amazon.com, Inc.
410 Terry Ave N
Seattle, WA 98109

Dear Mr. Jassy:

I write regarding concerns that Amazon is peddling misinformation about COVID-19 vaccines and treatments through its search and “Best Seller” algorithms. This is the second time in six months that I have identified Amazon practices that mislead consumers about COVID-19 prevention or treatment: earlier this year, I wrote regarding concerns that the company is providing consumers with false and misleading information about FDA-authorized KN95 masks.¹ This pattern and practice of misbehavior suggests that Amazon is either unwilling or unable to modify its business practices to prevent the spread of falsehoods or the sale of inappropriate products—an unethical, unacceptable, and potentially unlawful course of action from one of the nation’s largest retailers.

On the heels of the FDA’s full approval of the Pfizer-BioNTech COVID-19 vaccine² and amidst the rapid spread of the Delta variant, it is vital that Americans have access to accurate information about COVID-19 prevention and treatment—and about the safety and effectiveness of vaccines in particular.³ The highly infectious Delta variant is now responsible for over 90% of all COVID-19 cases in the United States,⁴ leading to surges in hospitalizations and deaths

¹ Letter from Senator Elizabeth Warren to Amazon CEO Andy Jassy, March 30, 2021, <https://www.warren.senate.gov/imo/media/doc/2021.03.30%20Letter%20to%20Amazon%20re%20Kn95%20masks%20sold%20on%20its%20site.pdf>.

² New York Times, “F.D.A. Fully Approves Pfizer-BioNTech’s Vaccine, a First for a Covid-19 Shot,” Sharon LaFraniere and Noah Weiland, August 23, 2021, <https://www.nytimes.com/2021/08/23/health/pfizer-vaccine-approval-fda.html>.

³ In addition to full approval for the Pfizer-BioNTech COVID-19 vaccine, the FDA has granted emergency use approval for the Moderna and Janssen COVID-19 vaccines. U.S. Food & Drug Administration, “COVID-19 Vaccines,” <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines>.

⁴ Centers for Disease Control and Prevention, “Variant Proportions,” <https://covid.cdc.gov/covid-data-tracker/#variant-proportions>.

especially among the unvaccinated population.⁵ This is largely “a pandemic of the unvaccinated,”⁶ with nearly one-fifth of Americans resistant to COVID-19 vaccination.⁷

At a time when every step towards ending the pandemic could save countless lives, misinformation poses a substantial obstacle. In February 2020, the World Health Organization declared an “infodemic” to describe the difficulty of finding reliable information about COVID-19 in today’s media environment.⁸ Conspiracy theories about COVID-19 abound; some insist that the virus is a hoax, others promote false cures to COVID-19, and many have led to untold illnesses and deaths.⁹ Despite the fact that vaccination remains our greatest tool to protect Americans from the virus, myths about COVID-19 vaccines continue to spread, often facilitated by technology companies that refuse to curb misinformation.¹⁰

Alarmingly, Amazon—the nation’s leading online retailer—and the company’s search algorithms appear to contribute to the spread of COVID-19 misinformation. During the week of August 22, 2021, my staff conducted sample searches on Amazon.com of pandemic-related terms such as “COVID-19,” “COVID,” “vaccine,” “COVID 19 vaccine,” and “pandemic.” The top results consistently included highly-ranked and favorably-tagged books based on falsehoods about COVID-19 vaccines and cures.

When staff searched for terms “COVID-19” and “vaccine,” the first result, presented prominently in the top left corner of the screen, was a book by Joseph Mercola and Ronnie Cummins called “The Truth About COVID-19: Exposing the Great Reset, Lockdowns, Vaccine Passports, and the New Normal.” Dr. Mercola has been described as “the most influential spreader of coronavirus misinformation online.”¹¹ Not only was this book the top result when searching either “COVID-19” or “vaccine” in the categories of “All Departments” and “Books”;

⁵ New York Times, “Where the Delta Wave Has Driven Up Covid-19 Vaccinations,” Lazaro Gamio and Amy Schoenfeld Walker, August 26, 2021, <https://www.nytimes.com/interactive/2021/08/26/us/vaccination-increase-covid-delta.html>.

⁶ NPR, “U.S. COVID Deaths Are Rising Again. Experts Call It a ‘Pandemic of the Unvaccinated,’” Becky Sullivan, July 16, 2021, <https://www.npr.org/2021/07/16/1017002907/u-s-covid-deaths-are-rising-again-experts-call-it-a-pandemic-of-the-unvaccinated>.

⁷ Gallup, “About One in Five Americans Remain Vaccine-Resistant,” Jeffrey M. Jones, August 6, 2021, <https://news.gallup.com/poll/353081/one-five-americans-remain-vaccine-resistant.aspx>.

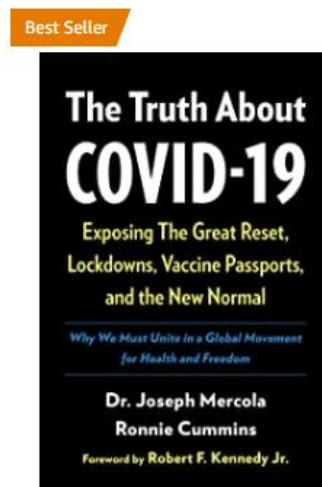
⁸ World Health Organization, “Novel Coronavirus (2019-nCoV): Situation Report – 13,” February 2020, p. 2, <https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200202-sitrep-13-ncov-v3.pdf>.

⁹ BBC, “Coronavirus: The Human Cost of Virus Misinformation,” Marianna Spring, May 27, 2020, <https://www.bbc.com/news/stories-52731624>; Associated Press, “Misinformation on Coronavirus Is Proving Highly Contagious,” David Klepper, July 29, 2020, <https://apnews.com/article/virus-outbreak-ap-top-news-understanding-the-outbreak-health-media-86f61f3ffb6173c29bc7db201c10f141>.

¹⁰ New York Times, “Virus Misinformation Spikes as Delta Cases Surge,” Davey Alba, August 11, 2021, <https://www.nytimes.com/2021/08/10/technology/covid-delta-misinformation-surge.html>; Politifact, “10 Types of COVID-19 Vaccine Misinformation Swirling Online, Fact-Checked,” Bill McCarthy, July 26, 2021, <https://www.politifact.com/article/2021/jul/26/10-types-covid-19-vaccine-misinformation-swirling->

¹¹ New York Times, “The Most Influential Spreader of Coronavirus Misinformation Online,” Sheera Frankel, July 26, 2021, <https://www.nytimes.com/2021/07/24/technology/joseph-mercola-coronavirus-misinformation-online.html>; NPR, “One of the Most Influential Voices in Vaccine Misinformation Is a Doctor,” Lulu Garcia-Navarro, August 8, 2021, <https://www.npr.org/2021/08/08/1025845675/one-of-the-most-influential-voices-in-vaccine-misinformation-is-a-doctor>.

it was tagged as a “Best Seller” by Amazon and the “#1 Best Seller” in the “Political Freedom” category.



The Truth About COVID-19:
Exposing The Great Reset,
Lockdowns, Vaccine Passports,
and the New Normal
by Doctor Joseph Mercola, Ronnie
Cummins , et al.
★★★★★ ~ 2,124
Hardcover
\$14⁹⁹ ~~\$24.95~~

The book perpetuates dangerous conspiracies about COVID-19 and false and misleading information about vaccines. It asserts that vitamin C, vitamin D, and quercetin—supplements sold on Mercola’s website—can prevent COVID-19 infection,¹² a claim with such little scientific basis that the FDA sent a letter instructing Mercola to cease selling these supplements for the unapproved and unauthorized treatment of COVID-19.¹³ And the book contends that vaccines cannot be trusted,¹⁴ when study after study has demonstrated the overwhelming effectiveness and safety of COVID-19 vaccines.¹⁵

It should come as no surprise that the book is rife with misinformation. One of the authors, Dr. Mercola, is one of the “Disinformation Dozen,” a group responsible for 65% of anti-

¹² McGill, Office for Science and Society, “The Upside-Down Doctor,” Jonathan Jarry, June 4, 2021, <https://www.mcgill.ca/oss/article/covid-19-health-pseudoscience/upside-down-doctor>.

¹³ Letter from U.S. Food & Drug Administration to Dr. Josepha M. Mercola, February 18, 2021, <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/mercolacom-llc-607133-02182021>.

¹⁴ McGill, Office for Science and Society, “The Upside-Down Doctor,” Jonathan Jarry, June 4, 2021, <https://www.mcgill.ca/oss/article/covid-19-health-pseudoscience/upside-down-doctor>.

¹⁵ Centers for Disease Control and Prevention, “Safety of COVID-19 Vaccines,” <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/safety-of-vaccines.html>.

vaccine content on Facebook and Twitter.¹⁶ He has posted over 600 articles on Facebook casting doubt on COVID-19 vaccines and been subject to multiple federal investigations (with one false-advertising investigation leading to a \$2.95 million consumer settlement).¹⁷ But Amazon’s algorithms promoted “The Truth About COVID-19” as a best seller and top result in response to common pandemic-related search terms.

This was not the only source of scientific misinformation that appeared prominently in response to searches for terms such as “COVID-19” or “COVID 19 vaccine.” On the search page for “COVID 19 vaccine,” the second result was a book called “Reversing the Side Effects of the COVID-19 Vaccine.” Among other falsehoods, the book claims that COVID-19 vaccines are “making people sick and killing them” and that “shedding ... is causing non-vaccinated people to become ill and suffer miscarriages.”¹⁸ Four different volumes of books by Alex Berenson—“the pandemic’s wrongest man”¹⁹—appeared on the first page of search results for “COVID-19” and were tagged as “Best Sellers.” “Ivermectin: What You Need to Know – A COVID 19 Cure?,”²⁰ a book that appears to tout ivermectin, which is used to treat parasites in livestock, as a COVID-19 miracle cure, also appeared on the first page of results for this search; attempts to self-medicate with ivermectin, based on the false belief that it is an effective prophylactic and treatment for COVID-19, have reportedly led to multiple hospitalizations and caused calls to poison-control centers to spike.²¹ The first page of search results for “COVID-19” even included a book called “Heal COVID-19 on Your Own,” which promotes “holistic self-ameliorative therapeutic techniques” as COVID-19 cures.²² Collectively, this is an astonishing sample of misinformation that appeared in only a few potential searches relating to COVID-19.

Amazon’s search and “Best Seller” algorithms do not produce static results, so the results of my staff’s August 22 review might provide different results if the searches were conducted repeatedly. But the basic problem is ongoing: a search for “COVID 19 vaccine” on September 7, 2021 placed both the Mercola book and “Reversing the Side Effects of the COVID-19 Vaccine” among the first three results.

¹⁶ Center for Countering Digital Hate, “The Disinformation Dozen: Why Platforms Must Act on Twelve Leading Online Anti-Vaxxers,” March 2021, p. 6, https://252f2edd-1c8b-49f5-9bb2-cb57bb47e4ba.filesusr.com/ugd/f4d9b9_b7cedc0553604720b7137f8663366ee5.pdf.

¹⁷ New York Times, “The Most Influential Spreader of Coronavirus Misinformation Online,” Sheera Frankel, July 26, 2021, <https://www.nytimes.com/2021/07/24/technology/joseph-mercola-coronavirus-misinformation-online.html>.

¹⁸ Amazon, “Reversing the Side Effects of the COVID-19 Vaccine: How to Heal Yourself from Adverse Reactions to the Trump Vaccine and Protect Yourself from Shedding,” <https://www.amazon.com/Reversing-Side-Effects-COVID-19-Vaccine/dp/1953006183>.

¹⁹ The Atlantic, “The Pandemic’s Wrongest Man,” Derek Thompson, April 1, 2021, <https://www.theatlantic.com/ideas/archive/2021/04/pandemics-wrongest-man/618475>.

²⁰ Amazon, “Ivermectin: What You Need to Know – A COVID 19 Cure?,” <https://www.amazon.com/Ivermectin-Cure-Covid-19/dp/1257633252>. As of September 2, 2021, it appears that Amazon has removed the book from its platform.

²¹ U.S. Food & Drug Administration, “Why You Should Not Use Ivermectin to Treat or Prevent COVID-19,” <https://www.fda.gov/consumers/consumer-updates/why-you-should-not-use-ivermectin-treat-or-prevent-covid-19>; Stat, “Ivermectin Calls to Poison Control Centers Spike,” Elizabeth Cooney, August 27, 2021, <https://mailchi.mp/statnews/tk-tncyc6de8v-610606?e=f5f67de109>.

²² Amazon, “Heal COVID-19 on Your Own: Explore Holistic Self-Ameliorative Therapeutic Techniques, Cure Waves of Covid-19 and, Respiratory Complications,” <https://www.amazon.com/Heal-COVID-19-Your-Self-Ameliorative-Complications/dp/B098G8XBQN>.

To its credit, Amazon does not appear to have any “sponsored” search results for pandemic-related terms, as it did for KN95 masks, although it does rely heavily on the “Best Seller” tag. The company also places a banner at the top of its search results page for these terms that links directly to the CDC website. But the results of my staff’s review are nevertheless deeply troubling. As cases of COVID-19 continue to rise, Amazon is feeding misinformation loops through its search and “Best Seller” algorithms, potentially leading countless Americans to risk their health and the health of their neighbors based on misleading and inaccurate information that they discover on Amazon’s website.

Other major technology companies have recognized their role in propagating misinformation about COVID-19 and have taken steps to address the issue. In response to concerns about COVID-19 misinformation on its platform, Facebook has removed pages, groups, and accounts spreading such misinformation and adjusted its algorithms to either remove misleading posts or display them less prominently.²³ Similarly, Twitter has published a COVID-19 misinformation policy that prohibits users from using its services “to share false or misleading information about COVID-19 which may lead to harm.”²⁴ The policy includes detailed procedures for identifying COVID-19 misinformation and penalizes sharers of such misinformation, leading Twitter to recently ban Alex Berenson—whose books appear prominently in Amazon searches—from its platform.²⁵

In fact, Amazon itself has removed books trafficking in misinformation from its platform in recent years. In March 2019, Amazon removed books pushing pseudoscientific cures to autism and debunked theories linking autism to childhood vaccines.²⁶ Earlier this year, Amazon publicly stated its policy to refuse to sell “books that frame LGBTQ+ identity as a mental illness” and removed books in violation of the policy.²⁷ Amazon has even reportedly removed books containing COVID-19 misinformation in response to prior inquiries, though there has been little transparency around the company’s policies.²⁸

Given the seriousness of this issue, I ask that you perform an immediate review of Amazon’s algorithms and, within 14 days, provide both a public report on the extent to which Amazon’s algorithms are directing consumers to books and other products containing COVID-19 misinformation and a plan to modify these algorithms so that they no longer do so. In order to

²³ Facebook, “How We’re Taking Action Against Vaccine Misinformation Superspreaders,”

<https://about.fb.com/news/2021/08/taking-action-against-vaccine-misinformation-superspreaders>.

²⁴ Twitter, “COVID-19 Misleading Information Policy,” <https://help.twitter.com/en/rules-and-policies/medical-misinformation-policy>.

²⁵ The Hill, “Twitter Bans Conservative Author Alex Berenson,” Olafimihan Oshin, August 29, 2021, <https://thehill.com/homenews/media/569908-twitter-bans-conservative-author-Alex-Berenson>.

²⁶ NBC News, “Amazon Removes Books Promoting Autism Cures and Vaccine Misinformation,” Brandy Zadrozny, March 12, 2019, <https://www.nbcnews.com/tech/internet/amazon-removes-books-promoting-autism-cures-vaccine-misinformation-n982576>.

²⁷ Wall Street Journal, “Amazon Won’t Sell Books Framing LGBTQ+ Identities as Mental Illnesses,” Jeffrey A. Trachtenberg, March 11, 2021, <https://www.wsj.com/articles/amazon-wont-sell-books-framing-lgbtq-identities-as-mental-illnesses-11615511380>.

²⁸ WIRED, “Amazon Quietly Removes Some Dubious Coronavirus Books,” Louise Matsakis, March 11, 2020, <https://www.wired.com/story/amazon-quietly-removes-coronavirus-books>.

fully understand Amazon's role in facilitating misinformation about COVID-19 and its actions to address the issue, I also request responses to the following questions by September 22, 2021:

1. What are Amazon's existing policies regarding the listing, promotion, and sale of books and other products containing COVID-19 misinformation on its platform?
2. What specific actions has Amazon taken to address the spread of COVID-19 misinformation via search results or other uses of its platform?
3. Why do Amazon's search algorithms prominently list books with COVID-19 misinformation?
4. Why do books with COVID-19 misinformation receive "Best Seller" tags from Amazon? What criteria does Amazon use to award these tags, and what steps does Amazon take to highlight products containing the tag?

Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Elizabeth Warren", written over a horizontal line.

Elizabeth Warren
United States Senator