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Why Is This Carcinogen in Hand Sanitizers?

Analysis by Dr. Joseph Mercola ✓ Fact Checked

December 18, 2021

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STORY AT-A-GLANCE

- The U.S. Food and Drug Administration issued temporary guidance in March 2020, allowing benzene in hand sanitizers at levels up to 2 parts per million (ppm)
- The allowance was made due to the COVID-19 pandemic, which triggered unprecedented demand for disinfectant products like hand sanitizers
- When hand sanitizer shortages emerged at the start of the pandemic, the FDAs temporary guidance allowed manufacturers to produce the products from top grades of ethanol
- Valisure tested 260 hand sanitizer products, including liquid and non-liquid products. They found that 44 batches, or 17%, contained benzene
- The FDA finally withdrew its temporary guidance for alcohol-based hand sanitizers on October 12, 2021, but it doesn't take effect until December 31, 2021 — nearly two years after it was issued

Benzene is a known human carcinogen, yet still ranks in the top 25 chemicals used in the U.S., based on production volume. Despite its known toxicity the U.S. Food and Drug Administration issued temporary guidance in March 2020, allowing it in hand sanitizers at levels up to 2 parts per million (ppm).[1]

The allowance was made due to the COVID-19 pandemic, which triggered unprecedented demand for disinfectant products like hand sanitizers. The U.S. Centers for Disease Control and Prevention recommends using alcohol-based hand sanitizer that contains at least 60% alcohol to prevent COVID-19 if soap and water aren't available.[2]

This, combined with panic and fear in the early days of the pandemic, led to shortages of hand sanitizer and supplies weren't enough to meet consumer demand. As evidence of its increased prevalence, calls to Poison Control related to hand sanitizer increased 79% in March 2020 compared to March 2019.[3]

This triggered the FDA to loosen its guidelines for the products, allowing increased levels of toxins like benzene, despite its cancer-causing potential.

FDA Opened the Door for Benzene-Laced Hand Sanitizer

When hand sanitizer shortages emerged at the start of the pandemic, the FDAs temporary guidance allowed manufacturers to produce the products from lower grades of ethanol, provided any toxics it contained fell under their interim limits.

In addition to benzene at 2 ppm, acetaldehyde, which is genotoxic and potentially carcinogenic, was allowed at levels up to 50 ppm, even as the agency stated, "Given the large number of applications of this product expected to consumers and health care providers during the public health emergency, exposure to hand sanitizer with high levels of acetaldehyde poses a significant safety concern."[4] Despite their loosened restrictions, the FDA stated:[5]

> "…*FDA is working with industry to ensure that harmful levels of impurities are not present in ethanol used in hand sanitizer. Upon further review of the data, we are temporarily providing flexibility with respect to certain impurities at the levels established* …
>
> *Based on our review of available data, we have determined these interim impurity levels can be tolerated for a relatively short period of time, given the emphasis on hand hygiene during the COVID-19 public health emergency and to avoid exacerbating access issues for alcohol-based hand sanitizer.*
>
> *Accordingly, during this public health emergency, FDA does not intend to take action against firms that manufacture fuel or technical grade ethanol for hand sanitizer that does not meet the USP or FCC requirements or firms that use such ethanol to prepare hand sanitizer on an interim basis, provided all other criteria for the production of the substance are present.*[6] …

The more opened the door for the manufacture of hand sanitizer using cheap, low-grade ethanol that poses a health risk to humans. The FDA finally withdrew its temporary guidance for alcohol-based hand sanitizers on October 12, 2021, but it doesn't take effect until December 31, 2021 — nearly two years after it was issued.

FDA Warns Consumers Not to Use Hundreds of Sanitizer Brands

So many hand sanitizers contain potentially harmful ingredients that they necessitated their own page on the FDA website. Titled "FDA Updates on Hand Sanitizers Consumers Should Not Use," as of December 1, 2021, there were 270 entries on their list, including products that were tested by the FDA and found to contain benzene, acetaldehyde, methanol, acetal or other toxins.

Other hand sanitizers on the FDA's "do not use" list were found to have microbial contamination, were made at the same facility as products that contain benzene and other toxins or were packaged in containers resembling food or beverage containers, posing an increased risk of accidental ingestion.[7]

In July 2020, the FDA warned that it had seen a sharp increase in hand sanitizer products labeled as containing ethanol (ethyl alcohol) but that tested positive for methanol contamination.[8] Methanol, or wood alcohol, is toxic and can be life-threatening if ingested.

By August 2020, the FDA warned consumers and health care professionals about hand sanitizer products found to be contaminated with 1-propanol, which can cause central nervous system depression and death if ingested.

Another warning, this one released in March 2021, involved Durban Antimicrobial Solutions Hand Sanitizer manufactured by Saint Technologies LLC, which was found to contain high levels of ethanol, isopropyl alcohol and flavoxate pickettii, bacteria that can cause serious infections, including infection of the skin, soft tissues, lungs or bloodstream.[9]

Then, in October 2021, the FDA found "unacceptable" levels of benzene, acetaldehyde and acetal in certain hand sanitizers produced by Artisanatus.[10] David Light, CEO of Valisure lab, which has been testing hand sanitizers for contaminants, told NBC News:[11]

> "The toxicity of benzene has been known for over 120 years. It's directly linked with causing leukemia in humans. It's a group one carcinogen, it's at the top of the FDA list of chemicals not to use in manufacturing. Benzene is an extremely dangerous solvent. From a chemical perspective, it's a great solvent, and it works very well to make chemicals. But as the FDA has said, they, very clearly, it should not be used for that."

Benzene Found in 44 Hand Sanitizer Products

Valisure tested 260 hand sanitizer products, including liquid and non-liquid products. They found that 44 batches, or 17%, contained benzene. The highest benzene level detected was 16.1 ppm, which is more than eight times the FDA's interim limit of 2 ppm.[12]

Benzene is found in crude oil, gasoline and cigarette smoke, and is also widely used to make chemicals used in the manufacture of plastics, synthetic fibers, lubricants, rubbers, dyes, detergents, drugs and pesticides. Benzene interferes with cells, causing bone marrow to not produce enough red blood cells, triggering anemia, for example. It can also cause immune system damage, including changes in antibody levels and loss of white blood cells.

After long-term exposure, benzene causes cancer in humans, particularly leukemia, and is known to lead to irregular menstrual periods and a decrease in ovary size in women, for reasons not fully understood.[13]

> "The major effect of benzene from long-term exposure is on the blood. (Long-term exposure means exposure of a year or more.) Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells, leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection."

Benzene's use in hand sanitizers is particularly egregious considering it can cause harm via skin absorption and inhalation, both of which are possible when hand sanitizer is used correctly and as intended. Valisure has asked its FDA to immediately recall the contaminated batches of hand sanitizer they revealed, and update its guidance to include an exposure limit for benzene along with a concentration limit.

They also found that at least 45% of the benzene-contaminated hand sanitizers contained additional ingredients intended to improve its smell, taste or appearance, increasing the risk of ingestion by children. In fact, Valisure stated, "Some of the highly contaminated batches Valisure analyzed appear to be specifically formulated and marketed for children."[14]

Antiperspirants Recalled Due to Benzene

November 23, 2021, Procter & Gamble voluntarily recalled certain lots of Old Spice and Secret aerosol spray antiperspirants and Old Spice Below Deck aerosol spray products sold in the U.S., due to the presence of benzene.[15]

It's ironic that the FDA has announced the voluntary recall, even acknowledging that "exposure to benzene can occur by inhalation, orally, and through the skin,"[16] yet it knowingly allowed increased levels of benzene in hand sanitizers throughout the pandemic — a time when people were using the products with increased frequency — without any warning.

Meanwhile, it warns that if you have any of the hand sanitizers on its "do not use" list, you should stop using it and "dispose of it, ideally in a hazardous waste container."[17] The FDA does not have the authority to force recalls, though it can warn about contaminated products.

However, unless you're in the habit of checking the FDA's website for recent warnings, or you happen to see something in the news, you'd have no way of knowing that the hand sanitizer you're using to "stay safe" may be exposing you to cancer-causing chemicals.

Do You Really Need Hand Sanitizer?

Overuse of hand sanitizers and other disinfectants can backfire. There are potential adverse effects to human health from inhaling disinfectants, as such chemicals are known to accumulate in the lungs, liver, kidneys, stomach, brain and blood. Exposures were increased during the pandemic for many people, who were exposed to disinfectants by inhalation and oral routes, as well as via the skin and eyes.

There are also significant environmental concerns due to the "unusual release and dissemination of higher concentrations of biocide-based products into the surface and underground waters and also wastewater treatment systems" during the pandemic.[18] When disinfectants and biocides enter the environment, they can wipe out beneficial bacterial species that are keeping drug-resistant microorganisms in check.

"[I]f the biocide concentrations reach the sub-minimum inhibitory concentration (sub-MIC), this event may augment the selective pressure, boost the horizontal gene transfer (HGT), and drive the evolution of AMR [antimicrobial resistance]," scientists warn.[19] Even during the pandemic, there's little hand sanitizers can do that soap and water can't.

Unless you're in a hospital setting, where disinfectants are sometimes necessary, you should use hand sanitizers sparingly and only when truly necessary, which typically will be hardly at all.

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"The Truth About COVID-19" exposes the hidden agenda behind the pandemic, showing the countermeasures have nothing to do with public health and everything to do with ushering in a new social and economic system based on totalitarian, technocracy-led control. So, it's not misinformation they fear. It's the truth they want to prevent from spreading. Pick up a copy of this best-selling book today before it's too late.

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lovesiowaigh
Joined On 10/20/2015 @ 04:05 AM
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Benzene - one of the nasties that breaks the blood brain barrier, well, breaks the barriers allowing things into our organs that shouldn't be there. Corn for Corners made a pretty big deal about scientists breaking those barriers. It's something I've grappled with for the past couple of decades. I think that's why it's so important to not put viruses and such injected into our bodies. I seem to remember Corners saying that the spike protein was designed to do just that. Well, I'm not a scientist, but I'm pretty sure that's what I read. I'm not scared anymore but I'm pretty sure I'm not going to subscribe to the thought of building stronger defenses by letting my body combat germs - I don't want to be a sterile environment, the sickest people I know, in general, are those who are obsessed with sterility. And not sterility of our environments at an all time high? Yeah - hate to think what kind of superbugs this kind of action will take.

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glenmeus
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Hulda Clark claimed she always found isopropyl alcohol in tumors.

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glueeze - YED - Isn't it Greek?

Mark as Spam Posted On: 12/19/2021 5:44:04 AM
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ishish3
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I don't and won't use hand sanitizer

Reply Mark as Spam Posted On: 12/18/2021 7:45:42 AM
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RandyGaz
Joined On 10/13/2015 @ 02:42 PM
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That's because you still have a functional brain.

Mark as Spam Posted On: 12/18/2021 10:06:47 AM
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Astroconical
Joined On 1/6/2021 @ 3:03 PM
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Just use soap and water. There are nastiness everywhere unless you are paranoid about soap and water!

Reply Mark as Spam Posted On: 12/18/2021 8:17:16 AM
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BenesGenes
Joined On 10/8/2015 @ 5:06:47 PM
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Hahaha

Mark as Spam Posted On: 12/18/2021 8:09:01 AM
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DetectCAT
Joined On 1/20/2019 7:47:03 PM
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I make my own hand sanitizer using alcohol water with a few drops of alcohol and either tea tree or Lavender oils. I keep a small spray bottle in my purse and use it as needed. Until I get the control, I hadn't been sick in at least 12 years. ... not once! AND, I truly believe I got the control from that first Pfizer shot but that's another story!

Reply Mark as Spam Posted On: 12/18/2021 11:50:06 PM
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RandyGaz
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In the stores here, hand sanitizers are everywhere (another money grab) in each store, throughout the store. Then you have the Lawnmoja who carry it with them everywhere they go. I've tried to tell people that they are making of the good bacteria off their hands and they will only be left with more bad bacteria, which will probably mutate (think antibiotic resistance). Very few listen. I wash my hands when I eat, or go to the bathroom. Anything beyond that, is superfluous.

Reply Mark as Spam Posted On: 12/18/2021 10:24:47 AM
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earthlover
Joined On 2/09/2006 8:27:25 PM
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Acetaldehyde is used in flavorings. One is (artificial) hazelnut flavoring.

Reply Mark as Spam Posted On: 12/18/2021 7:16:20 PM
Like Dislike

BeatrixW
Joined On 10/20/2006 7:25:55 AM
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Why is benzene allowed? Because "they" want to kill you.

Reply Mark as Spam Posted On: 12/18/2021 1:56:41 PM
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versatile
Joined On 10/16/2007 4:23:09 PM
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Two things we know about COVID: 1. We know how to cure COVID. Statistics, updated every day, show over 200 million cases RECOVERED. The are a few problems. Even though most cases are cured by the natural healthcare and cures are improvised and more are added by simple holistic actions like Vitamins and minerals, and more again benefit from well known antiviral and other medication. Some of the cures are established, others are hypothesis, those very cures establishment, both corporate and governmental, cannot recognize and ban not documented in single case of COVID cured. Cured is not a source of profit. We've failed to cure only because - when we cure, we can't sell.

2. Big medicine is so powerful that they can control the MSM, Social Media, Google and Wikipedia. Even with this, it is not a significant impact. The statistics are clear, in spite of possibility not allowed to be released or prevented from proper access. Why? Because that people those three everywhere and no one would dare to pick them up. Scientifically, SF studies have shown them to be ineffective when the virus is present. Most masks are even worse than no virus is present. Social distancing is a nonsense for of everyone, even as we know that only a very small percentage of people develop disease - and most who do tend to recover quickly - within a few weeks as the "pandemic" approaches its second year.

Sanitizing is great, if you are in the business of selling diluted poisons. Evidence of efficacy is totally lacking, especially considering that most sanitizing efforts are done in the absence of the virus. Vaccines are nonsense. If they worked as a preventative, we would not be subjected to concurrent pressure to vaccinate, constant boosters, and we would definitely not be vaccinating our children. There's only one problem. Preventatives don't need to work to be more profitable than cures. We've failed to prevent COVID in the most obvious way, by curing it.

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dlz1910
Joined On 12/31/2020 6:08:47 AM
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I find it rather interesting that the vast majority on the fda list were manufactured in Mexico. All the more reason to buy USA products. We have gotten ourselves in a real pickle by sending our manufacturing overseas. Now we're at the mercy of the rest of the world.

Reply | Mark as Spam | Posted On 12/18/2021 6:36:20 AM

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Rosebud10000

Joined On 12/12/2016 1:59:16 AM

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In my country staff at the entrance of shops etc are petrified about losing their job if you don't take your squirt of poison even if you literally just had one. I either wipe it off immediately, that is acceptable to them, or squirt from a bottle of water I carry.

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Joe_Below

Joined On 3/17/2020 11:04:08 PM

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There's benzyl chloride too. The U.S. government finds it efficient to route toxic waste into consumer products. It helps with the overall goal of population control.

Reply | Mark as Spam | Posted On 12/18/2021 9:45:07 PM

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jab2121

Joined On 9/29/2020 6:12:05 PM

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The FDA always shitting

Reply | Mark as Spam | Posted On 12/18/2021 9:45:13 AM

Like Dislike

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kmschrack

Joined On 10/12/2014 10:04:07 AM

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When we visited Universal Studios in July 2020, they had workers squirting hand sanitizer on everyone's hands before getting on the rides. I asked to see which sanitizer it was but the labels were pulled off. I asked if it was one of the toxic ones that were banned. The workers just said I had to get it. So I let them squirt it and then I rubbed it off. People just do what they are told without question. We are all doomed.

Reply | Mark as Spam | Posted On 12/18/2021 7:51:32 AM

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visiwig

Joined On 3/8/2016 8:44:15 AM

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Here in the UK we can get hold of hypochlorous acid which is better at killing covid, and perfectly safe.

Reply | Mark as Spam | Posted On 12/18/2021 6:29:46 AM

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poiesis

Joined On 10/8/2019 9:54:33 AM

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go figure :)

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