

Coronavirus Disinfectants May Be Extremely Hazardous to Health

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Health officials' 'List N' includes disinfectants approved for use against SARS-CoV-2, the virus that reportedly causes COVID-19, but that doesn't mean they've been approved as safe for humans. Now experts are worried we'll be facing a new epidemic of health problems linked to these toxic chemical exposures

The consequences of the [COVID-19](#) pandemic may turn out to be worse than the reported disease itself. Experts have predicted a coming mental health crisis in the U.S., as Americans struggle with financial insecurity, job losses, social isolation and fears about returning to public life.^[1] Privacy concerns also continue to emerge, as contact tracing apps and other methods of surveillance morph into the new "normal."

Unchecked disinfection procedures, including those recommended by public health agencies, are another major concern. Prior to the pandemic, chemical disinfectants had been linked to health problems, but the accelerated pace at which these toxic chemicals are now being used is causing unprecedented levels of exposure -- with unknown consequences to human health.

'List N' Disinfectants May Not Be Proven Safe for Humans

In response to COVID-19, the U.S. Environmental Protection Agency (EPA) released "List N," which is a list of about 400 disinfectants^[iii] that meet the EPA's criteria for use against SARS-CoV-2.^[iiii] To meet the criteria, the disinfectants must demonstrate effectiveness against a harder-to-kill virus or demonstrate efficacy against a human coronavirus similar to SARS-CoV-2.

"[T]his doesn't mean that they have been approved because they're considered safe with regard to human health," exposure scientist Lesliam Quirós-Alcalá, an assistant professor at Johns Hopkins Bloomberg School of Public Health, told Bloomberg.^[iv] While studies on many of the chemicals are limited, some have been linked to asthma and other respiratory conditions, reproductive effects and neurological and dermatological problems.^[v]

Exposure to disinfectants and cleaning products has long been linked to health risks. Among nurses, for instance, exposure to cleaning chemicals at work was associated with a 25% to 38% increased risk of chronic obstructive pulmonary disease (**COPD**).^[vi] This included disinfectants with the active ingredients glutaraldehyde and quaternary ammonium compounds, variants of which are included on the EPA's List N.

Research published in the American Journal of Respiratory and Critical Care Medicine also found that women responsible for cleaning at home, or who worked as house cleaners, had accelerated declines in lung function, and long-term respiratory health was impaired 10 to 20 years after cleaning activities.^[vii]

"[E]xposures related to cleaning activities may constitute a risk to long-term respiratory health," the study concluded, with researchers stating that the damage to respiratory function for women cleaners was similar to **smoking a pack of cigarettes every day** for 10 to 20 years.

"The effect size was comparable to the effect size related to 10-20 pack-years of tobacco smoking," they wrote^[viii] -- one "pack-year" is equivalent to smoking 20 cigarettes (one pack) per day for one year. Other common symptoms that can occur from exposure to chemical disinfectants include nausea, eye irritation and headaches.

Ramped Up Disinfecting a 'Hazardous Proposition'

Health risks likely increase with increased levels of disinfectant exposure, making coronavirus disinfectants particularly risky due to the high frequency of application.

The EPA, in their guidance for cleaning and disinfecting public spaces and homes against COVID-19, recommends surfaces frequently touched by multiple people, such as door handles, desks, faucets and light switches, be disinfected at least daily, with certain surfaces, such as shopping carts and sale keypads, being disinfected more often, including before each use.^[ix]

Speaking with Bloomberg, Rich Feczko, national director of systems, standards and innovation at Crothall Healthcare, said the pace at which the company is cleaning hundreds of hospitals has accelerated. "Our frequencies have ramped up in public places like lobbies and elevators to 6-8 times per day," with restrooms cleaned every two hours.^[x]

"This is a hazardous proposition," immunologist and allergist Dr. Claudia Miller told the news outlet. "Cleaners tend to go in with hugely toxic chemicals. We're creating another problem for a whole group of people, and I'm not sure we're actually controlling infections."^[xi]

Spraying Disinfectants May Be Especially Dangerous

Adding to the problem is the way some of the disinfectants are being applied. Using sprayers that aerosolized disinfectants is becoming increasingly popular during the pandemic, as it allows cleaners to cover far more space in a shorter period of time. Electrostatic sprayers also add a positive charge so the chemicals stick to surfaces.

Not only have the risks of aerosolized disinfectants not been explored, but most of the disinfectants on List N have not been approved for aerosolizing, misting or fogging.^[xii] Further, it's likely that spraying the chemicals poses increased inhalation risks, as it generates micro-particles and possibly even smaller nanoparticles, which are absorbed into the body faster and in greater quantities than larger particles.

The New Jersey Department of Health (NJDOH) issued a health alert bulletin that fogging ambulances with toxic disinfectants may cause illness after four emergency medical technicians were diagnosed with work-related asthma.

"Fogging is not recommended in ambulances," NJDOH warned, adding, "Often, the active ingredients are respiratory irritants and sensitizers and include chemicals such as, chlorine, phenol, quaternary ammonium compounds ("quats"), alcohols, or hydrogen peroxide compounds (listed in decreasing order of toxicity)."^[xiii]

The World Health Organization (WHO) similarly warned, "In indoor spaces, routine application of disinfectants to surfaces via spraying is not recommended for COVID-19. If disinfectants are to be applied, these should be via a cloth or wipe which is soaked in the disinfectant."^[xiv] Despite this, industrial cleaning companies are moving to use spraying technologies once reserved for hospitals in school busses.

"If we can spray it in a Hershey's food plant or at a hospital, we can certainly spray it on a school bus," Bob Gorski, president of cleaning company Merrick Group, told Bloomberg.^[xv] Around the world, clouds of disinfectant are even being dispersed into the sky via drones, even though experts have warned the practice likely is not effective and could be toxic to humans.^[xvi]

When it comes to chemical disinfectants, reducing your exposure is wise, especially if they're being used in an enclosed space like a vehicle, elevator or high-rise building with poor circulation. For times when cleaning is necessary, there are many natural methods available for cleaning purposes, as well as safer disinfectants like [ultraviolet light](#). As it stands, however, the aggressive disinfection procedures being implemented in the name of COVID-19 could end up causing far more harm than good.

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Herbs: General	7	8	Q
Quercetin	7	7	Q
Hostyayma cordata	3	5	Q
Nigella arvensis (aka Black Seed)	1	5	Q
Sweet Orange	1	5	Q
Probiotics	3	4	Q
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Catschin	3	3	Q
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References

- [i] KFF April 21, 2020 <https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/>
- [ii] U.S. EPA April 23, 2020 <https://www.epa.gov/newsreleases/epa-provides-critical-information-american-public-about-safe-disinfectant-use>
- [iii] U.S. EPA, List N <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>
- [iv] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>
- [v] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>
- [vi] JAMA Netw Open. 2019;2(10):e1913563. doi:10.1001/jamanetworkopen.2019.13563 <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2753247>
- [vii] *Am J Respir Crit Care Med*. 2018 May 1;197(9):1157-1163. doi: 10.1164/rccm.201706-1311OC. <https://pubmed.ncbi.nlm.nih.gov/29451393/>
- [viii] *Am J Respir Crit Care Med*. 2018 May 1;197(9):1157-1163. doi: 10.1164/rccm.201706-1311OC. <https://sci-hub.tw/10.1164/rccm.201706-1311OC>

[ix] U.S. EPA, Guidance for Cleaning and Disinfecting April 28, 2020 https://www.epa.gov/sites/production/files/2020-04/documents/316485-c_reopeningamerica_guidance_4.19_6pm.pdf

[x] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>

[xi] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>

[xii] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>

[xiii] New Jersey Department of Health, Health Bulletin <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwi22POurLLqAhXBLs0KHXSzDZ4QFjAMegQIBRAB&url=http%3A%2F%2Fnasemso.org%2Fwp-content%2Fuploads%2FAlert-Fogging-Ambulances-May-Cause-Illness-NJ.pdf&usg=AOvVaw14mKpEcsuy4xiCZvV53nWO>

[xiv] World Health Organization May 16, 2020 <https://www.who.int/news-room/q-a-detail/q-a-considerations-for-the-cleaning-and-disinfection-of-environmental-surfaces-in-the-context-of-covid-19-in-non-health-care-settings>

[xv] Bloomberg June 15, 2020 <https://www.bloomberg.com/news/articles/2020-06-15/rush-to-disinfect-offices-for-covid-19-worries-health-experts>

[xvi] Reuters March 31, 2020 <https://www.reuters.com/article/us-health-coronavirus-disinfection/mass-disinfections-to-combat-coronavirus-pose-another-health-hazard-idUSKBN2111PB>



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