

There Is Hope: 19 Innovations That Could Put an End to COVID

These ideas and new products could help bring the pandemic to a halt.

The best [antidote to anxiety](#) is information. Information-gathering launches problem-solving. The best [antidote to depression](#) also is [finding solutions to getting what you want](#). For relief from anxiety and depression provoked by the COVID pandemic therefore, the following information and solutions hopefully will help.

Most of the items on the following encouraging list come from Jay McCrensky of [the CCC—the COVID Control Consortium](#)—a group that assists companies in bringing to market innovative prevention and treatment solutions to COVID-19. Thank you, Jay!

[Please note that the claims made in this technology list are those of the individual companies and not of CCC or of this author.]

Prevention Of COVID Via Sanitation

Sanitation refers to COVID-killing products that purify the air, disinfect surfaces, and sanitize fabrics for virus-free workplaces, schools, and travel vehicles—taxis, buses, trains, and planes. With virus-free air and surfaces, there is no contagion.

1. *Saltwater Biocides* and *Clarentis Technologies* use hypochlorous acid (HOCL) to sanitize air and disinfect surfaces in hospital and nursing home

patient rooms, emergency rooms, dental offices, meat processing plants, schools, and more. Spraying their proprietary fine smoke-like mist makes air and surfaces virus-free.

2. *Phoenix Technologies* offers a patented scalable UV/ novel filtration system to keep airborne viruses out of buildings. Phoenix recently installed UV emitters into the HVAC system of the prestigious Johns Hopkins Hospital. Phoenix also offers a unique long-lasting antimicrobial surface treatment that keeps surfaces virus-free for over six weeks.

Prevention of COVID via Personal Protective Equipment

Personal protective equipment (PPE) refers to masks, uniforms, hand sanitizers, isolation chambers and sprays that protect both the wearer and nearby individuals.

3, *CrownStar Bio* produces a spray that turns conventional face masks into a barrier that is 99.9% deactivators of viruses. This green product is made of natural ingredients that are GRAS (generally accepted as safe by the FDA). The developers especially recommend its use by school children to make their masks truly protective.

4. *IXE Medica* is commercializing its sanitary patient isolation chamber, a tube that protects both the COVID patient and everyone around them. Its initial use in Mexico has been for ambulance transport. Would be appropriate also for hospitals and at-home isolation of infected individuals.

5. *Phoenix Technologies* has a patent on a promising advanced biological gas mask/respirator utilizing UV technology. The company also offers a full

line of totally antimicrobial hospital fabrics, scrubs, lab coats, and bed linens. Their anti-virus actions lasts even after 100 washings.

6. *Sonnovia* facemasks, available now via the web, kill all viruses that touch a mask. They protect you from others' breath and protect others from you if you should be carrying the virus.

Faster, Easier, and Less Expensive Screening and Testing

Screening now consists mainly of someone taking temperatures at the doors of stores. Testing requires an uncomfortable throat swab followed by three days in a lab. The following innovative devices provide more rapid, cheaper, easier, and more accurate mass screening and testing for schools, office buildings, train stations, airports, malls, factories, and sporting or cultural events.

7. Israeli *Newsight Imaging*, partnering with Sheba Medical Center outside of Tel Aviv, is seeking regulatory approval for a [new saliva test](#) that determines whether or not you are infected with COVID-19. The test involves rinsing your mouth with a saline wash then spitting into a vial. A small spectral device shines light on this specimen and analyses the reaction to see if it is consistent with COVID-19. Each [test](#) costs less than 25 cents; the device will eventually cost less than \$200. Results are clear in less than one second.

8. *ANC Sensors* has developed a three- to five-second biometric screening technology that can identify individuals with Coronavirus symptoms within 5 feet. Their sensors measure not only body temperature, but also pulse/heart rate, breathing anomalies, chills, and oxygen saturation, and with this data can quickly spot the patterns characteristic of COVID-19. The

next-generation product will add sensors for chest palpations, liquid in the throat and lungs, glucose sodium, sweat, and red and white blood cell count. Patients found to be positive in this initial screening will be asked to undergo a further rapid diagnostic test.

9. Researchers from India and Israel have been teaming up to test [a voice-based analytic virus test](#).

10. *Nanose Medical*, another Israeli company, has created a [COVID breath test that](#) uses nanotechnology to identify compounds that are present in the breath of coronavirus patients. [In clinical trials in Wuhan, China](#), this test effectively identified COVID, distinguishing it even from other lung diseases. Once the test devices, which are about the size of a smartphone, are being commercially produced—hopefully within approximately six months—they will cost only approximately \$2 to \$3 per person. The breath test will be fast, taking just two to three seconds to administer and giving results within 30 seconds. In addition, [no workers](#) need to touch the patient or handle their sample, which is good both for efficiency and for hygiene.

New COVID treatments

11. *Kvadro Biotech* of Russia has identified and patented a strain of *Streptococcus* bacteria that stimulates T-cell response. Their team of veterinary scientists and physicians has conducted extensive canine studies and have found that the T-cell response from this bacterial strain eliminates viruses. They are close to approval in Russia as a veterinary medication for dogs.

12. *Respinova* of Israel has developed a medical device for COPD patients that has potentially major applications for coronavirus. The device pulses

air into the lungs and thereby opens blocked airways, strengthening the lungs as well as their ability to breathe. The device could diminish the need for ventilators and the associated risks, saving lives.

13. *InnBioTec Pharma* of Florence Italy is about to start human trials on their glutathione-based medication for COVID patients. The researchers have confidence that their bio-available form of the anti-oxidant and anti-inflammatory glutathione could help prevent or treat interstitial lung syndrome

14. *Prof. Zvi Symon* of the Radiation Oncology Department at Sheba Medical Center in Israel reports excellent results in tests of [treating COVID with low dose radiation therapy](#). The protocol calls for about 1/70th or 1/100th of the dose used to treat cancer. Dr. Symon, who has been administering this new use of a long-established cancer treatment under the compassionate use umbrella, reports that, "Patients who received radiation ... got off oxygen and could breathe well in three to four days, whereas patients that did not receive the radiation took an average 12 days after pneumonia." Symon added that the treatment needs to be given at the right time—at the start of acute symptoms, before overwhelming multi-organ damage.

15. A Jerusalem-based company is finding that injecting patients with [COVID antibodies](#) can rapidly reverse the course of the illness.

16. *Low doses of corticosteroids* (but not other kinds of steroids) are effective for recovery from severe COVID. [See this helpful research summary](#). Here's an excerpt:

"Following reports in June that the cheap steroid drug dexamethasone could help treat patients severely ill with COVID-19, scientists and clinicians urged caution. They were careful to highlight the need for further study to confirm the drug's place—as well as that of similar steroids—in the treatment of the disease.

The World Health Organization has now offered this confirmation. It has published an analysis showing that severely ill COVID-19 patients' survival rates improved when they were treated with *dexamethasone* and other *corticosteroids*."

17. Levels of Vitamin D differentiate between mild and more severe COVID cases. Getting lots of sun and/or taking the vitamin in pill form may be both preventive and healing. In addition, vitamin C and zinc can be helpful supplements. And these do not need to be doctor-prescribed.

18. A research team led by Hebrew University of Jerusalem Prof. Yaakov Nahmias and Dr. Benjamin tenOever at New York's Mount Sinai Medical Center have found that the COVID virus prevents the routine burning of carbohydrates. As a result, large amounts of fat accumulate inside lung cells, enabling the virus to reproduce.

With this information in hand, Nahmias and tenOever began to screen FDA-approved medications that interfere with the virus' ability to reproduce. In lab studies, the long-familiar cholesterol-lowering drug Fenofibrate (Tricor) showed extremely promising results. [In initial trials, within five days of treatment, the virus almost completely disappeared.](#) If these findings are borne out by further clinical studies, this course of treatment could

potentially downgrade COVID-19's severity into nothing worse than a common cold.

19. *Cinnamon* turns out to have a component that prevents the covid-19 virus from doing any damage. An Israeli company called [Q Rona](#) is turning the ingredient into sugar-free lozenges that can be used, hopefully, both for COVID prevention and treatment. Early tests look promising both for efficacy and for no significant side effects. The lozenges would be inexpensive, costing less than a dime each to produce, and do not need FDA drug approval as they are considered a food supplement rather than medication.

[Q Rona](#) is poised for further clinical testing and then to go quickly into production as soon as they have obtained further funding. Know any with money to invest in something that tastes like candy yet may be able to save us all from the COVID plague?

Vaccines

Multiple countries have joined the race to develop a COVID vaccine. President Trump has cleared regulatory hurdles—with an aim to optimizing both safety and speed—to complete vaccine testing and bring multiple vaccines. Much is in the news on this front however so I will leave that arena to journalists.

Feeling encouraged? Less anxious or depressed about COVID-19?

The main question now is how soon these products can complete final testing, be approved by the FDA (for sanitation technologies by the EPA), funded for large-scale production, and brought to market.

May the COVID pandemic soon be defeated and COVID-related anxiety and depression soon be gone!