

## How Coronavirus Spreads

*Keywords: covid, spreading, droplet, people, infect, ventilated, way.*

*Source: <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>*

### *Summary:*

COVID-19 is thought to spread mainly through close contact from person to person, including between people who are physically near each other (within about 6 feet). COVID-19 most commonly spreads during close contact. People who are physically near (within 6 feet) a person with COVID-19 or have direct contact with that person are at greatest risk of infection.

Infections occur mainly through exposure to respiratory droplets when a person is in close contact with someone who has COVID-19.

COVID-19 can sometimes be spread by airborne transmission. Some infections can be spread by exposure to virus in small droplets and particles that can linger in the air for minutes to hours.

Available data indicate that it is much more common for the virus that causes COVID-19 to spread through close contact with a person who has COVID-19 than through airborne transmission.

## COVID-19 Is Now the Third Leading Cause of Death in the U.S.

*Keywords: covid, disease, years, causes, death, health, positive.*

*Source: <https://www.scientificamerican.com/article/covid-19-is-now-the-third-leading-cause-of-death-in-the-u-s1/>*

### *Summary:*

“It affects virtually nobody,” President Donald Trump said of the novel coronavirus on September 21—a few hours before U.S. deaths from COVID-19 exceeded 200,000 and less than two weeks before he tested positive.

COVID-19 became the third biggest cause of deaths in the week of March 30 to April 4, trailing heart disease and cancer.

In that week, close to 10,000 people died of the illness caused by the coronavirus.

The flu, which Trump and others have invoked when discussing COVID-19, led to 1,870 deaths (a figure that includes pneumonia) over the same time frame.

A spike in the week-by-week accounting came in mid-April, when COVID-19 cases became the leading cause of death.

Provisional death counts from the Centers for Disease Control and Prevention show that more people died every month from March to August this year than during the same period in the past 20 years.

The share of Americans who died in the first eight months of this year was greater than that of any year going back to 1970—a year that paradoxically turned out to be a good one for public health.

## **COVID-19 Ripple Effect: The Impact of COVID-19 on Children in New York State : Publications**

*Keywords: children, economic, poverty, long, hospital, consulting, disparate.*

*Source: <https://uhfnyc.org/publications/publication/covid-19-ripple-effect-impact-covid-19-children-new-york-state/>*

### *Summary:*

The associated press release can be found [here](#).

A new analysis estimates that COVID-19 has led to severe, long-lasting, and racially disparate repercussions on children under age 18 in New York State.

These include children who have lost a parent or guardian or who have entered poverty or are near poverty as a result of the pandemic.

Conducted by United Hospital Fund and Boston Consulting Group, the analysis estimates that between March and July 2020, 4,200 children experienced a parental death; and 325,000 children have been pushed into or near poverty as a result of the pandemic's economic downturn.

This analysis is broken out in two parts, which can be downloaded on this page.

Part 1 highlights the impacts of parental death on New York's children.

Part 2 addresses COVID-19's poverty-related effects and broader economic implications.

Also available for download on this page is a look at county-specific data in New York State, as well as a literature review.

## COVID-19 Testing Guidance

*Keywords: tested, infected, patients, local, disease, contacts, antigen.*

*Source: <https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-testing-guidance/>*

### *Summary:*

The most common scenarios in which to consider testing include: Patients with symptoms consistent with COVID-19 Patients who were in close contact with a person with confirmed or probable SARS-CoV-2 infection Patients who require screening based on recommendations from public health authorities or other situations ( eg , prior to a medical procedure such as elective surgery or as a school or workplace requirement) Patients with symptoms consistent with COVID-19 Testing should be considered with any of the following symptoms: Fever or chills Cough Congestion or runny nose Loss of taste or smell Shortness of breath or difficulty breathing Body aches Fatigue or headache Sore throat Nausea, vomiting, or diarrhea The decision to test does not differ by the age of the child, although some symptoms such as body aches, shortness of breath, and loss of taste/smell are more prevalent in young adults than in school-aged children.

Testing household contacts of newly infected persons for active SARS-CoV-2 infection by PCR or antigen test (see below) can be considered but may be falsely reassuring if negative, because continued contact with the infected household member may delay the onset of active infection for up to 14 days following the last exposure.

Asymptomatic patients without recent exposure to an infected person will have a low risk of positivity if randomly tested for return to public/community settings, and there is a risk of false-positive test results, depending on the platform used.

It is important for pediatricians to educate families that a negative test result decreases the risk of spreading disease but does not make it “safe” to return to activity and does not eliminate the need for masking, social distancing, and quarantining as appropriate per the recommendations of the CDC and local health authorities.

Additionally, pediatricians should be guiding families about risks of false-negative test results as well as the importance of quarantining/testing for symptoms and close contact with possibly infected persons.

The use of antigen tests in asymptomatic patients is generally not recommended because of the very low pretest probability and risk for false positivity.

## Covid Myth-Busting

*Keywords: myth, lessons, reality, studies, dangerously, covid, learned.*

*Source: <https://medium.com/@robinschoenthaler/covid-myth-busting-b5b26b22970f>*

### *Summary:*

From Mail to Uncle Maskless to Motrin: Watching Science Bust Some Myths Photo by Alejandro Barba on Unsplash Remember how frightened we were in March?

Myth One: Your mail and groceries are dangerous as the virus can live on them for days. But studies showing **WHOLE CONTAGIOUS VIRUSES ALIVE AND TRANSMISSIBLE** on materials are rare, and now after all these months there are still no documented studies of people getting Covid from surfaces.

Very little transmission happens if you're wearing a mask.

Reality: in multiple studies, health care workers with good PPE actually have **LOWER** antibody levels and rates of Covid infection than people in the community.

But then I only had to stop at the one store and well yeah it was Total Wine but just the one bottle of Chardonnay, well, yes the gallon-sized bottle, and yes it took an hour since the line went out the door but I'm totally staying safe!" Lesson Learned: The Aunt Petunias of the world need to stop saying "I'm being safe" when they're categorically not.

Reality: we did not see surges of cases after protests where people were mostly masked.

## Schools Aren't Super-Spreaders

*Keywords: schooling, data, low, rate, remote, community, new.*

*Source: <https://www.theatlantic.com/ideas/archive/2020/10/schools-arent-superspreaders/616669/>*

### *Summary:*

Juliette Kayyem: Reopening schools was just an afterthought School-based data from other sources show similarly low rates.

Texas reported 1,490 cases among students for the week ending on September 27, with 1,080,317 students estimated at school—a rate of about 0.14 percent.

In places such as Florida, preliminary data haven't shown big community spikes as a result of school openings.

One might argue, again, that any risk is too great, and that schools must be completely safe before local governments move to reopen them.

The spring interruption of schooling already resulted in learning losses; Alec MacGillis's haunting piece in *The New Yorker* and *ProPublica* highlights the plight of one child unable to attend school in one location, but it's a marker for more.

The children affected by school closures are disproportionately low-income students of color.

Houston, for example, has opened some schools as learning centers.

L.A. has learning centers set up for low-income students in alternative locations.

These spur the questions: If school isn't safe for everyone, why is it safe for low-income students?

And if school is safe for low-income students, why isn't it safe for everyone?

But by not opening, we are putting people at risk, too.

## Here's How the Pandemic Finally Ends

*Keywords: people, says, stay, little, immunity, future, masking.*

*Source: <https://www.politico.com/news/magazine/2020/09/25/how-covid-19-pandemic-ends-421122>*

### *Summary:*

"Even if you don't get herd immunity ... the closer you get to it, the slower the virus spreads," says Krammer, who expects many of the vaccines in development to work.

"I'm not sure people get that," says Offit.

I can engage in high risk activity.' And that would put us right back to where we were." Adds former CDC director Tom Frieden: "I think even with a vaccine, for the indefinite future, handshakes are out and masks are in." The key to figuring out what's possible with a vaccine, Landon says, is patience.

"You have to treat the vaccine the same as a masking policy.

You make a policy that everybody has to wear masks and then some percentage of people actually do." Similarly, "You give people a vaccine, and then some proportion of people will actually get the vaccine and some proportion of them will be protected." Next, you wait to see whether the Covid-19 disease and death counts go down, which will take about two months after people receive their doses—a few weeks for people to develop immunity and then four to six weeks for that protection to appear in the numbers.

## Air Cleaners, HVAC Filters, and Coronavirus (COVID-19)

*Keywords: air, indoors, filter pollutants, particle, viruses, removes, buildings.*

*Source: <https://www.epa.gov/coronavirus/air-cleaners-hvac-filters-and-coronavirus-covid-19>*

### *Summary:*

Caution: The use of air cleaners alone cannot ensure adequate indoor air quality, particularly where significant pollutant sources are present and ventilation is insufficient. When used properly, air cleaners and HVAC filters can help reduce airborne contaminants including viruses in a building or small space.

Top of Page Air cleaners and HVAC filters in Homes How to select a portable air cleaner for a residence that can effectively remove viruses Choose a portable air cleaner that is intended for the room size in which it will be used and be sure it meets at least one of the following criteria: it is designated as High-Efficiency Particulate Air (HEPA), it is CADR rated, or the manufacturer states that the device will remove most particles in the size range below 1  $\mu\text{m}$ .

Portable air cleaners and HVAC filters can reduce indoor air pollutants, including viruses, that are airborne.



## Coronavirus Posts

*Keywords: achievement, challenges, customer satisfaction, crewmembers, surpassing expectations, delivering, safety.*

*Source: <http://blog.jetblue.com/category/archives/coronavirus/>*

*Summary:*

## UV Lights and Lamps: Ultraviolet-C Radiation, Disinfection, and Coronavirus

*Keywords: uvc, lamp, radiation, fda, surface, regulations, skin.*

*Source: <https://www.fda.gov/medical-devices/coronavirus-covid-19-and-medical-devices/uv-lights-and-lamps-ultraviolet-c-radiation-disinfection-and-coronavirus>*

### *Summary:*

Given the current outbreak of Coronavirus Disease 2019 (COVID-19) disease caused by the novel coronavirus SARS-CoV-2, consumers may be interested in purchasing ultraviolet-C (UVC) lamps to disinfect surfaces in the home or similar spaces.

UVC radiation may also be effective in inactivating the SARS-CoV-2 virus, which is the virus that causes the Coronavirus Disease 2019 (COVID-19).

However, currently there is limited published data about the wavelength, dose, and duration of UVC radiation required to inactivate the SARS-CoV-2 virus.

**Dose and duration:** Many of the UVC lamps sold for home use are of low dose, so it may take longer exposure to a given surface area to potentially provide effective inactivation of a bacteria or virus.

**Risks:** UVC lamps used for disinfection purposes may pose potential health and safety risks depending on the UVC wavelength, dose, and duration of radiation exposure.

**Effectiveness:** The effectiveness of UVC lamps in inactivating the SARS-CoV-2 virus is unknown because there is limited published data about the wavelength, dose, and duration of UVC radiation required to inactivate the SARS-CoV-2 virus.

To learn more about a specific UVC lamp, you may want to: Ask the manufacturer about the product's health and safety risks and about the availability of instructions for use/training information.

The wavelengths emitted by the lamp may affect the lamp's effectiveness at inactivating a virus and may impact the health and safety risks associated with the lamp.

## Cleaning Hospital Rooms With Chemicals, UV Rays Cuts Superbug Transmissions

*Keywords: patients, studied, cleaned, hospitalized, said, duke, specific.*

*Source: <https://medicine.duke.edu/medicinenews/cleaning-hospital-rooms-chemicals-uv-rays-cuts-superbug-transmissions>*

### *Summary:*

A new study from Duke Medicine has found that using a combination of chemicals and UV light to clean patient rooms cut transmission of four major superbugs by a cumulative 30 percent among a specific group of patients -- those who stay overnight in a room where someone with a known positive culture or infection of a drug-resistant organism had previously been treated.

"Several groups have demonstrated that enhanced cleaning strategies such as using portable UV machines can kill these germs, but this is the first well controlled study that shows these techniques can make meaningful difference in patient outcomes." The standard approach for room cleaning involves the use of a quaternary ammonium disinfectant, or "quat." Participating hospitals used three methods for killing the germs: irradiating the room with UV after using a quat, replacing the quat with bleach, and replacing the quat with bleach and irradiating the room with UV light.

The light disrupts the DNA of these germs and kills them." In the specific subgroup of patients who were studied, the method resulted in an almost one-third cumulative reduction in acquiring any of the four superbugs or developing infections in the following three months, the researchers found.

