Wall Street Journal Coronavirus Special Edition

A condensed, curated version

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Overview

BACKGROUND

What is a coronavirus?

The virus behind the current pandemic belongs to a family known as coronaviruses. Named for the crown-like spikes on their surfaces, they infect mostly bats, pigs and small mammals. But they mutate easily and can jump from animals to humans, and from one human to another. In recent years, they have become a growing player in infectious-disease outbreaks world-wide.

Seven strains are known to infect humans, including this new virus, causing illnesses in the respiratory tract. Four of those strains cause common colds. Two others rank among the deadliest of human infections: severe acute respiratory syndrome, or SARS, and Middle East respiratory syndrome, or MERS.

This new virus is called severe acute respiratory syndrome coronavirus 2, or SARS-CoV-2. The disease it causes is called Covid-19. (The number stands for 2019, the year it emerged.)

Where did the new coronavirus come from?

The new virus likely came originally from bats. One hypothesis is that the intermediary animal for this new virus may be a pangolin, a small mammal sold in wildlife markets, prized for its meat and scales. Health officials believe the outbreak originated in a large animal and seafood market in Wuhan, China.

WHAT TO WATCH FOR

What are the symptoms of the illness and how do you know if you have it?

- Patients initially develop a fever, cough and aches, and can progress to shortness of breath and complications from pneumonia.
- Other reported symptoms include fatigue, sore throat, headache and nausea, with vomiting and diarrhea.
- Some people become only mildly ill or are infected but don't get sick. Others are mildly ill for a few days, then rapidly develop more severe symptoms of pneumonia.
- Some patients haven't had a fever initially or might develop a "walking pneumonia," meaning they might spread their infection to others because they aren't sick enough to be in a hospital.

What is the incubation period?

- People become ill between 2 and 14 days after infection.
- One report described a person who became ill 27 days after infection.
- However, most start showing symptoms about 5 days after infection.

Symptoms	Coronavirus Symptoms range from mild to severe	Cold Gradual onset of symptoms	Flu Abrupt onset of symptoms
Fever	Common	Rare	Common
Fatigue	Sometimes	Sometimes	Common
Cough	Common* (usually dry)	Mild	Common* (usually dry)
Sneezing	No	Common	No
Aches and pains	Sometimes	Common	Common
Runny or stuffy nose	Rare	Common	Sometimes
Sore throat	Sometimes	Common	Sometimes
Diarrhea	Rare	No	Sometimes for children
Headaches	Sometimes	Rare	Common
Shortness of breath	Sometimes	No	No

Sources: World Health Organization, Centers for Disease Control and Prevention

THE DANGERS

How deadly is it?

- The mortality rate has ranged between 2% and about 3.4%.
- But public-health scientists say the real death rate is probably lower than the current estimates. The overall mortality rate may be less than 1%. But, that is still deadlier than seasonal flu, which has a mortality rate of about 0.1%.
- Covid-19 appears to be less deadly than SARS, which killed about 10% of the people it infected. The new coronavirus is also far less deadly than MERS or Ebola.

THE WAY IT TRAVELS

How is the virus spread among humans?

- It transmits through "respiratory droplets" when an infected person speaks, coughs or sneezes.
- The droplets spread through the air and can land on another person's mouth or nose, or possibly be inhaled into their lungs, infecting them.
- The droplets can also settle on nearby surfaces like a desk, counter, or doorknob, where they can survive for a period.
- A person can become infected by touching a contaminated surface, then touching their mouth, nose or eyes.
- Respiratory droplets are heavy and don't travel far in the air, so transmission is believed to occur mostly through close contact, meaning within 6 feet of an infected person.

How easily does the virus spread?

- Disease-modeling experts have estimated that, on average, each infected person has transmitted the virus to about 2.6 others, though the range is between 1.5 and 3.5.
- Those rates are higher than for seasonal influenza but far lower than measles, in which one infected person can transmit the virus to 12 to 18 other people. Public-health experts caution that these estimates are preliminary.

How should I treat packages from China? Is it possible to transmit the virus through the mail?

- The CDC has stated there is likely very low risk that the virus can be spread from products or packaging shipped from China, because of poor survivability of coronaviruses on surfaces.
- Also according to the CDC, there currently is no evidence to support transmission of the coronavirus associated with imported goods, and there have been no reported cases of the virus in the U.S. associated with imported goods.

IF YOU HAVE SYMPTOMS…

What do I do if I am coughing or have a fever and wonder if it might be the new coronavirus?

Contact your doctor if you have concerns. Right now, the odds are greater that your cold or fever is caused by influenza.

When should I go to the hospital?

Experts say you should go to a hospital if you're sick enough that you think you should be admitted. The telltale sign is difficulty breathing or shortness of breath combined with a fever of 101 degrees or higher.

If my child or anyone else in my household is coughing or has a fever, do I need to keep them home too? For how long?

- <u>Definitely</u> keep them at home.
- Children should be home <u>until there is no sign of infection</u>, which is when their symptoms have resolved and they are fever-free without any medications for at least 24 hours.

What, if any, precautions should be taken by pregnant women?

- Experts say <u>pregnant women fall into the vulnerable category</u> of people more likely to get seriously ill with the new virus. They should avoid large public gatherings and overall precautions should be heightened.
- Make sure you have <u>an influenza shot if you are pregnant</u> and reach out to your doctor to see if they have contingency plans if new coronavirus cases escalate, such as conducting a virtual visit through telemedicine when possible.

WHAT SUPPLIES YOU NEED

Should I buy a mask or gloves?

- There's <u>no evidence that masks help if you're healthy</u>. While the N95 masks used in hospital settings can be effective, they need to be fitted for the individual. That occurs for health-care workers in hospitals but not when people buy such masks online or over the counter.
- You could consider <u>wearing a mask if you're sick or in close contact with an ill child or loved one</u>.
- <u>Gloves are only useful if you're taking care of an ill child or loved one and are in contact with bodily fluids</u>. Wear gloves if you're changing an ill child's diaper or cleaning up vomit. Wearing them on a day-to-day basis for prevention is not helpful, as we touch our hands, eyes and mouth frequently.

What else can I do to protect myself?

- <u>The most important thing you can do is wash your hands frequently</u>, for at least 20 seconds each time. ***(See "How to wash your hands effectively," page 11)***
    - Wash them regularly when you are <u>at the office, when you come home, before you eat and other times that you are touching surfaces</u>.
    - You can also use an alcohol-based hand sanitizer.
- <u>Don't touch your eyes, nose or mouth</u> — viruses can enter your body that way.
- Maintain a <u>distance from people who are sick</u>.
- <u>Wipe down objects and surfaces frequently with household cleaner</u>, which will kill the virus.
    - If it is a <u>surface exposed to sunlight outside</u>, the virus likely only lives for a few minutes or up to an hour.

- o But if it is <u>indoors and a dry environment, germs can live up to a day or two.</u>
- o If someone at home is sick, clean surfaces that are touched frequently, such as doorknobs and countertops, every day.
- o Regular household disinfectant wipes and cleaners should suffice. <u>Anything with alcohol or bleach works</u>.

- <u>Get a flu shot</u>, if you didn't get one already.
- <u>Stock up on some supplies</u> in case you have to stay home. To avoid cleaning out store shelves, just buy a few extras on your regular orders or trips to the store. ***(See "How to stock up for coronavirus without getting fleeced," page 14)***
  - o <u>Items to consider include:</u>
    - o Shelf-stable foods like cans of beans, packages of rice and pasta, and beverages
    - o Pain relievers and other common medications
    - o Extra prescription medications
    - o Hygiene and cleaning products.

AVAILABLE TREATMENTS

Are there drugs to treat the new coronavirus?

<u>There aren't any drugs or vaccines approved specifically</u> for the new virus. But several are in development or being studied. ***(See "What the pharmaceutical industry is doing," page 8)***

Is there a test for the virus?

- <u>Yes, there are diagnostic tests,</u> which are the only way to confirm for certain whether a person has the new coronavirus or another infection.
- Right now, <u>in the U.S., a test is hard to get</u>.
- Because symptoms of Covid-19 are like those of the flu, the <u>tests are given only to people who doctors or public-health officials believe may have the disease</u>.
- More tests are being distributed, and the CDC says doctors may decide whether a patient should be tested.

STAYING OUT OF CIRCULATION

What if I have to self-isolate?

If you are <u>told to self-isolate</u>, you will need to <u>stay at home and avoid contact with others for 14 days</u>.

- Try <u>not to stay in the same room with others</u> at the same time.
- <u>Stay in a well-ventilated room with a window that can be opened</u>.
- <u>Don't share</u> towels, utensils or dishes with others, and <u>wash them thoroughly after use.</u>
- <u>Clean bathrooms and surfaces regularly.</u>
- <u>Wash your hands before and after contact with pets</u>.

- Don't go out to public places; ask family members or friends to get groceries, medicines and other supplies for you. Ask delivery people to leave items outside.

  (See "How to work from home," page 22)

MONEY MATTERS

Who is paying for testing?

- For now, most people with health insurance will likely have the cost of coronavirus testing covered in the way that any other type of care is covered — including whatever they may owe in copays, coinsurance or under a deductible.
- While tests given by public-health departments may be free, private labs or hospitals are likely to charge. A growing number of big insurers — including Cigna Corp., CVS Health Corp. 's Aetna, Anthem Inc., and Cambia Health Solutions' Regence plans — are pledging that members will pay no out-of-pocket charges for coronavirus testing.
- Some states, including California, New York and Washington, have gone further. They have said that insurers should waive charges not just for the lab tests, but also for doctor or emergency-room visits that patients make to get tested for the virus.
- However, the states' rules don't apply to all kinds of coverage. They don't regulate Medicare plans or self-insured employer coverage, for instance.
- Federal regulators note that lab testing generally doesn't involve out-of-pocket charges for those covered by Medicare, but beneficiaries could still owe their deductibles and coinsurance for other diagnostic care related to the coronavirus, such as imaging tests.

Who is paying for treatment?

- Care for those who are diagnosed with Covid-19 is likely to be covered by health insurers and programs like Medicare in the same way that other care is covered.
- That could change if the big coronavirus-related legislative package that President Trump signed Friday leads to federal help with the cost of such care. The package includes $2.2 billion for the CDC to contain the outbreak, but the details aren't yet clear. Also, the Trump administration is considering using a national disaster program to pay hospitals and doctors for their care of uninsured people infected with the coronavirus.
- Meanwhile, some items, like masks used to prevent infection, may be paid for through flexible-spending and health-savings accounts. But, hand sanitizer and soap aren't generally eligible expenses, nor are over-the-counter medications, unless prescribed by a doctor.

THE BIG PICTURE

How worried should I be?

- Most people who are infected might become only mildly ill, data suggest. But "mild" can be anything from a fever, cough and aches to pneumonia that doesn't become too severe. For most people it is probably just a few sniffles. And mild or not, you'll have to be isolated or quarantined.
- Of 44,672 cases in China, 81% had mild or moderate symptoms, 13.8% were severely ill, and 4.7% were critically ill. All of those who died were in critical condition.

How long will this virus last and remain a potential threat? Will it always be a part of our environment, or will it run its course and completely disappear?

- Most forecasters are reluctant to predict how this will play out over months or even years. It isn't yet clear how many people have the disease, how quickly it is spreading or even how deadly it is.
- The SARS coronavirus strain was gone within months. But that didn't happen with the MERS strain.

Who is most at risk?

Data from China show death rates that are startlingly higher than the average for:

- **People age 60 and over (and especially those age 70 and older)**
- **People with an underlying illness, such as (in order of danger):**
    1. **cardiovascular disease**
    2. **diabetes**
    3. **chronic respiratory disease, such as asthma**
    4. **high blood pressure**
    5. **cancer**
    6. **other chronic conditions**

In one large study by the Chinese Center for Disease Control and Prevention, 14.8% of people 80 and older and 8% of people 70 to 79 died. For people with cardiovascular disease, the mortality rate was 10.5%, and 7.3% for those with diabetes. Those rates compared with a 2.3% mortality rate in the overall population.

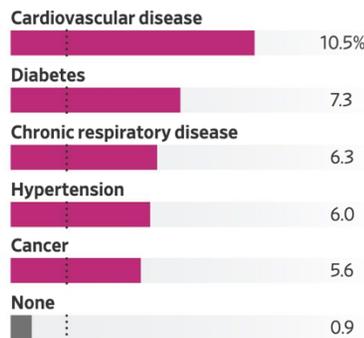**Who's Vulnerable?**

Among a large, early group of patients—those diagnosed with the new coronavirus in mainland China through Feb. 11—the death rate was highest for people over 60 and those with underlying illnesses.

Death rate among diagnosed patients...

...by age group

Overall death rate, 2.3%

Age group	Death rate
Under 10	0.0%
10–19	0.2
20–29	0.2
30–39	0.2
40–49	0.4
50–59	1.3
60–69	3.6
70–79	8.0
80+	14.8
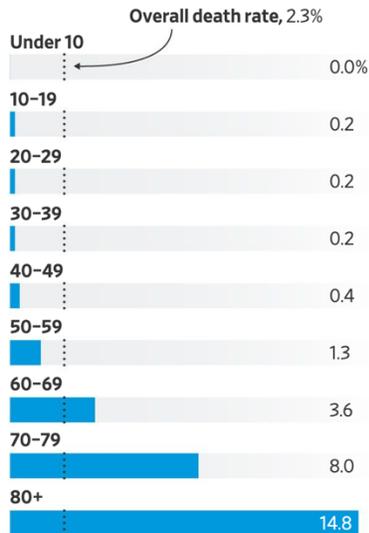
...and by underlying condition

Condition	Death rate
Cardiovascular disease	10.5%
Diabetes	7.3
Chronic respiratory disease	6.3
Hypertension	6.0
Cancer	5.6
None	0.9

Source: Chinese Center for Disease Control and Prevention

- The number of Americans 65 and over rose 27% between 2011 and 2018 to 52.4 million, while the under-65 cohort grew 2%.
- Older Americans make up 16% of the U.S. population.
- About 46% of American adults have high blood pressure.
- About 34.2 million people, or 10.5% of the U.S. population, have diabetes.

As people age, the immune system gradually loses its ability to mount a response to an infection as robustly as it once did.

Health officials say Italy's aging population is a big reason behind the large outbreak and high current death rate of 5% in that country. Italy and China also have higher smoking rates, which may be a factor in their high death rates among older adults.

People at higher risk should heed the same precautions that exist for everyone:

- wash hands regularly
- stay away from sick people
- keep up-to-date on vaccines for flu and pneumonia
- avoid large gatherings
- limit close contact with others when out in public
- stay home as much as possible

But a bridge game with a few trusted friends — who aren't sick— is OK. It's important to stay socially connected even if physical connection is limited. Connecting by phone or video with older relatives who are alone is a good idea. Social isolation has been linked to adverse health outcomes.

How vulnerable are children?

- So far, children seem to be surprisingly less vulnerable to severe infection.

    o Only 2% of the patients in a review of nearly 45,000 confirmed Covid-19 cases in China were children, and there were no reported deaths in children under 10. (In contrast, there have been 136 pediatric deaths from influenza in the U.S. this flu season.)

    o But scientists suspect children could play a key role in transmitting the disease: Even if they're not suffering severe symptoms themselves, children may "shed" large amounts of virus and may do so for many days. Children had virus in their secretions for six to 22 days, or an average of 12 days.

- Some of the best ways to limit the spread

    o Make sure kids are washing their hands frequently
    o Keep them out of school and away from other people if they are sick
    o Clean surfaces often.

What the pharmaceutical industry is doing

Looking for new drugs

Testing of several potential drugs and vaccines has already started.

- As of now, there aren't any approved drugs or vaccines that cure the virus
- It will take at least 12 months to 18 months to know if a vaccine is safe and effective
- The quickest path to a product that is going to provide some benefit will likely be some type of therapeutic product

Researchers ramped up their discovery efforts in January after scientists in China provided the virus's genetic sequence.

- At least 35 potential vaccines are under development
- More than 40 life-sciences companies have virus-related projects, including drugs, diagnostics and vaccines
- Nearly 400 global clinical trials related to the coronavirus are under way

The newness of the virus is complicating research efforts. That makes it harder to determine what measurements will indicate a patient's response to a therapy. Already, finding patients eligible to undergo testing hamstrung one trial in China.

- Inovio Pharmaceuticals Inc. plans to begin testing its experimental vaccine in healthy volunteers next month and publish its human clinical-trial data this fall.

- Healthy volunteers in the Seattle area have begun enrolling in a trial testing Moderna Inc.'s experimental vaccine. The program has moved relatively quickly, though federal health officials have cautioned that use of the shots is more than a year away.

- Emergent BioSolutions Inc. said that it is trying to develop treatments, one of which would be derived from the blood of coronavirus patients who have recovered.

Evaluating existing drugs

Some of the most advanced programs are exploring whether drugs discovered for other uses might be effective treatments for Covid-19.

- Among them: an antiviral therapy from Gilead Sciences Inc., called **remdesivir,** that was developed to treat the deadly Ebola virus but then scrapped after proving less effective than rival drugs during testing.

Researchers revived the drug after the Covid-19 virus was found to belong to a family of coronaviruses. In mice, remdesivir had worked against Middle East Respiratory Syndrome (MERS), another coronavirus. Researchers in the U.S. and China have started testing remdesivir in people infected with the coronavirus. The company says it will start its own late-stage studies this month.

- Also under study are some approved HIV drugs, like **Kaletra** from AbbVie Inc. and **Prezcobix** from Johnson & Johnson, to see whether they could work against new-coronavirus infections. In January, both companies supplied their drugs to Chinese authorities for testing.

Media in China have reported that AbbVie's Kaletra is proving effective, but the company says it can't confirm the reports without access to data from the trial. A J&J spokesman says the company didn't have an update on the China research.

- Regeneron Pharmaceuticals Inc. and Sanofi SA are taking steps to start studying in patients whether their drug **Kevzara,** approved to treat rheumatoid arthritis, could treat symptoms of new coronavirus infections.
- Roche Holding AG is exploring conducting U.S. studies of its similar-acting rheumatoid-arthritis drug, **Actemra**. Researchers in China have already begun a study, according to a spokeswoman for Roche's Genentech subsidiary.

Pfizer Inc. and Merck & Co., which sell some of the world's most widely used vaccines, say they are assessing whether their assets may be potentially worth using toward coronavirus. J&J aims to begin a trial later this year with its experimental vaccine candidate, while Sanofi hopes to potentially enter trials with its own within a year and a half.

Preventative Measures

How to wash your hands effectively

Proper handwashing means scrubbing hands with soap and water for at least 20 seconds. Yet just 5% of people spend more than 15 seconds washing their hands after using the restroom, and 10% don't wash their hands at all.

—Use soap. Before applying soap to your hands, run water over them. Soap and water together, with rubbing, is what helps rinse organisms off your hands and down the drain. Don't worry about removing hand jewelry. Those need to be washed, too.

- Soap acts as a surfactant: a substance that helps release bacteria's grip from your hand when water is added. The study of college students, however, showed only two in three people used soap. The rest just rinsed their hands.

- Half a teaspoon of liquid soap is enough, or a glob about the size of a quarter, although bigger hands might need more. Too much soap can remove your skin's natural oils, which have helpful antibacterial properties.

- Soaps with antibacterial ingredients don't provide any health benefits or remove more germs than plain soaps. All soaps, however, can deactivate a coronavirus so it can no longer infect you.

- The new coronavirus, named SARS-CoV-2, is a spherical structure with spiky proteins attached to a membrane that surrounds the pathogen's genetic material. Once it comes into contact with soap, this membrane dissolves, leaving behind a dysfunctional virus.

—Scrub all surfaces of your hands. People on average wash their hands for only about six seconds. Twenty seconds is what's recommended — or, the length of the "Happy Birthday" song sung twice — though it depends on what you touched and how often.

- And even 20 seconds is not helpful if you're not washing the right places.

- How to Scrub Your Hands (see video)

    o Step 1: Scrub your palms together in a circular motion

    o Step 2: Scrub the back of your hands

    o Step 3: Scrub your fingertips and under your nails

    o Step 4: Scrub between your fingers and around your thumb

- Rubbing these surfaces with enough force is critical. People who have longer nails should be extra cautious.

- Scrubbing too hard or too frequently can damage your skin by making it dry and more susceptible to cracking. Cuts and cracks give germs the perfect spot to set up shop. To avoid skin damage, use a moisturizer after washing.

- Studies have shown that water temperature doesn't affect how many germs are removed. The CDC says warm or cold water will do, but some experts warn that when water is too hot, it can also damage skin.

- After a thorough scrub with soap, remove all suds by rubbing every surface of your hands under running, clean water to ensure that pathogens get washed away. Leaving some soap behind may also soak up moisture from your hands, leaving them dry and more likely to crack.

—Dry your hands completely. Moist hands give living organisms a better chance of surviving and spreading to others.

- The CDC says there is not enough data to confirm whether a significant amount of germs are transferred from the faucet knob to your hands. Some experts suggest using a paper towel to turn the water off, while others discourage it because it wastes paper towels.

- Automatic blowers and paper towels both dry hands well.

—Use alcohol-based sanitizers in a pinch. They cannot kill all viruses, like the norovirus, which lacks a dissolvable envelope. But a sanitizer can kill any coronavirus on your hands as long as it's made up of at least 60% alcohol. Plain rubbing alcohol also works, but sanitizers maintain a balance of alcohol and other ingredients to help keep skin healthy and moisturized.

- It's important to use enough sanitizer to cover the entire hand – about half-teaspoon to one teaspoon.

- Sanitizer works only when it's still wet, so don't use paper towels to dab your hands. Give the product at least 10 seconds to complete its job, then rub your hands together or let them air-dry.

How to keep your home free of coronavirus germs

- Disinfect high-touch surfaces, such as countertops, doorknobs, cellphones and toilet flush handles, since some pathogens can live on surfaces for several hours.

   - The Environmental Protection Agency recently released a list of approved disinfectants to kill coronavirus.

- o For surface cleaning, look for products such as wipes, sprays and concentrates that say "disinfectant" on the label and include an EPA registration number. These are required to meet government specifications for safety and effectiveness.

- However, many people don't disinfect properly. First, you might need to clean — removing grease or grime — before you disinfect. Second, the disinfectant needs to remain on the surface, often for several minutes, before it dries or is wiped off.

- Don't overuse chemical cleaners or, worse, mixing cleaners in hopes of boosting their effectiveness. Just read the labels on everyday products to clean and disinfect the right way.

- Wash hands vigorously with soap and water for at least 20 seconds. As a backup, use hand sanitizers that are at least 60% alcohol.

- For a homemade disinfectant, the CDC recommends mixing a quarter-cup of household chlorine bleach with one gallon of cool water.

- After disinfecting food-prep surfaces such as cutting boards and countertops, rinse them with water before use.

- For laundry, use detergent and bleach (for white loads) or peroxide or color-safe bleach (for colors) to kill germs. (Be sure to read clothing labels to avoid damaging garments.) To boost the effect, some washing machines have sanitize or steam settings that kill germs. Drying laundry on the dryer's hot cycle for 45 minutes also is effective.

- If possible, operate dishwashers on the sanitizing cycle. Machines certified by NSF International, formerly known as the National Sanitation Foundation, must reach a final rinse temperature of 150 degrees and achieve a minimum 99.999% reduction of bacteria when operated on that cycle.

- Household air purifiers and filters that advertise the ability to kill or capture viruses can be useful but shouldn't be a substitute for cleaning. Some purifiers use ultraviolet light, which has been shown to have germicidal effects, but their overall effectiveness can vary depending on their design, according to a 2018 technical summary of residential air cleaners by the EPA. While some filters advertise the ability to capture things like viruses, smoke and common allergens, they don't necessarily kill microorganisms.

How to stock up for coronavirus without getting fleeced

- <u>If you can wait, wait.</u> Products will eventually be back on shelves, so there's no need to overpay.

- <u>Can't find sanitizer? Use soap and water</u>. According to the Centers for Disease Control and Prevention, [washing hands with soap and water](#) is more effective than hand sanitizer for removing certain kinds of germs.

- <u>Shop local — but don't trust websites showing "in-store" inventory. Prices at brick-and-mortar retailers haven't skyrocketed the way they have online</u>, so you could get a better deal on products in person — if you can find them.

  - [Instacart](#)can show up-to-date information on what's in stock at your local store. Instacart uses real-time shopper input, plus historical purchase data, to keep its catalog as up-to-date as possible. During peak shopping times, that data offers a good picture of hour-by-hour changes.

- <u>Not sure which retailers sell what? Try a comparison-shopping service.</u> [BuyVia](#) and [Google Shopping](#) (also available as apps) are designed to help shoppers compare products and prices across multiple retailers.

  - *BuyVia* is better at comparing offerings from online sources like Amazon and Chewy.

  - *Google Shopping* reveals brick-and-mortar stores that might have what you're looking for. Select "Available nearby" for results from retailers near you.

- <u>Keep searches generic</u> (e.g. "disinfectant wipes," not [_"Clorox_](#) [CLX 5.72%](#)wipes") to yield the most comprehensive results. Again, call the store to confirm the item is in stock before you visit.

- <u>If you must buy online, consult price trackers to avoid being gouged</u>.

  - [CamelCamelCamel](#) shows an item's price history and emails you when there's a price drop on Amazon. One issue: You'll receive an alert only for that specific item, while there might be hundreds of listings for the same or similar products.

  - [Keepa](#) has a browser extension that displays an item's price history right on the Amazon product page.

- <u>Sign up for Amazon product-availability alerts.</u> For some out-of-stock products on Amazon, a sign-up button will appear where the "Buy" button typically is. <u>It's important to note that the alert doesn't reserve the product for you, so you'll need to act quickly</u>

when you receive it. You can view your product availability alerts in your Amazon Account settings.

- Before you checkout, take note of shipping costs. In one Amazon listing for an 8 oz. bottle of Purell, the cost of shipping ($14.49) was nearly as much as the product itself ($15).

- Watch for how Amazon sellers represent (or misrepresent) stock and quality. An item might appear available, but take a look at its shipping time, below the price. One Amazon listing for Wet Ones showed "In stock on April 9, 2020."

- Look for small text that reads, "Ships from and sold by." If the seller is a third party, it'll say, "Sold by [seller's name] and Fulfilled by Amazon." Click the link attached to the third party's name to read its reviews. Is it a mix of very positive and very negative reviews? (A potential red flag.) No reviews at all? (A definite red flag.) Do reviews mention that received items were expired or appeared counterfeit? (Walk away.)

   - You'll need to apply the same level of vetting on *Walmart's* website, which also carries items from third-party sellers.

   - *Be extra careful on eBay.* Because many transactions on eBay are user to user, it's hard to know the source of the product you're buying. Plus, many listings on the site don't include the item's expiration date, and many sellers aren't offering returns for consumable products like hand sanitizer.

- Don't fall for ads making coronavirus-related medical claims. Facebook and the Advertising Standards Authority in the U.K. recently banned these kinds of exploitative advertisements, but there are still promotions hawking medical face masks and miracle cures floating around the ether.

How to travel during the coronavirus pandemic

Packing

- Take extra supplies of any medications in case your travel gets disrupted and you can't get home or end up getting quarantined.

- Take lots of hand sanitizer, some in travel-size bottles and some in your checked luggage or TSA liquids bag.

- Take disinfecting wipes, cold medicine, a thermometer and health-insurance documentation in case you get sick, and extra work, reading and entertainment in case you get delayed.

At the airport

- Sanitize or wash hands immediately after going through the Transportation Security Administration (TSA) checkpoint, and certainly before you touch your eyes, nose or mouth.

- Be wary of the many risks of exposure at the checkpoint. Airline officials have pointed out that TSA isn't cleaning its checkpoints nearly as aggressively as airlines are cleansing airplanes. TSA checkpoints are public spaces where people are in close quarters and sharing surfaces.

- Three TSA screeners working at Mineta San Jose International Airport in California have tested positive for Covid-19, the disease that results from the new coronavirus.

- The TSA has set up a website with information about its response to the coronavirus.

On the airplane

- Open the air vent and aim it in front of your face. Air on planes is zoned and runs through hospital-grade filters that capture 99.9% of contaminants, including viruses. It may be the cleanest air you get all day.

- Wipe down surfaces like tray tables and arm rests to disinfect. Airlines have stepped up cleaning of airplanes, but much of it occurs overnight. That doesn't protect you from the person on the previous flight if the plane you are boarding has just landed.

- Wash or sanitize hands after touching public surfaces like bathroom doorknobs, sink handles and overhead-bin latches.

- Consider a window seat. There is some research showing that passengers in window seats stay put more than people in aisle seats, and so are exposed to fewer people. Also, there's a risk of someone infected walking down the aisle and sneezing or coughing on the person in the aisle seat.

- Remember, medical studies show the hot zone on an airplane is two seats around you in any direction. If someone near you is coughing or sneezing, move — there should be plenty of empty seats.

At the hotel and elsewhere

- Wash hands with soap for at least 20 seconds (sing the alphabet song to make sure you wash long enough).

- Use hand sanitizer that's at least 60% alcohol.

- Avoid touching your eyes, nose and mouth with unwashed hands.

- Avoid close contact with people who are sick.

What if I have tickets but don't want to travel?

- If you bought your ticket before March and planned to travel in March or April, most big airlines will waive cancellation or change fees. Delta, United and American began doing this March 9. In most cases, you'll get a voucher good toward future travel. Pay close attention to when the voucher expires. It may be one year from when you bought the ticket, which by now may not be much time.

- If you bought a ticket before March and plan to travel in May or later, most airlines have not yet issued waivers from fees. Sit tight. There will be time to cancel, unless you face other deadlines for cruises or hotel bookings. If the pandemic continues for several months, waivers will be coming. If it subsides, you may well feel safe traveling this summer.

- If you buy a ticket now, almost all airlines are selling tickets without change fees or cancellation penalties. (Southwest does all the time, which gives you the most flexibility.) If you change your mind, you likely won't get a refund, just a voucher.

Does travel insurance cover you?

- Not for coronavirus cancellations. At this point, the threat is well-known, so it is not insurable. Besides, most policies exclude pandemic, and the World Health Organization has officially made that classification.

- The one insurance product that experts say still offers some coverage is Cancel for Any Reason insurance. You have to buy it within a week or two of your first payment on a trip. It costs more and it typically covers only 60% to 70% of your losses.

How can I get a refund on a nonrefundable ticket?

- If an airline cancels your flight (and you still have a ticket for it), the airline has to refund what you paid. It's simple: The airline isn't delivering the service you bought.

- If an airline changes its schedule and you don't want the new flights, you will be entitled to a refund in most cases. At American, for example, a schedule change of 61 minutes or more gives you the option to get a refund. (Alternatively, you can choose to accept the new flights offered, of course.) At United, rules are changing: United has gone from a two-hour threshold to now saying that the schedule has to be "significantly" different to get a refund.

How to boost your immune system

- Keep your stress levels down. The stress hormone cortisol turns off cells in your immune system. Engage in activities that you find relaxing, such as meditation.

- Exercise. Low- and moderate-intensity exercise naturally lowers cortisol levels and helps with immune-system function – 30 to 60 minutes of exercise a day is recommended. Be careful not to over-exercise because it can weaken your immune system.

- Get adequate sleep. For adults, that means getting seven to eight hours of sleep a night. Children should get more, depending on their age.

- Make sure your vaccines are up-to-date, especially the flu vaccine.

- Avoid antibiotics unless you must take them because they deplete the good bacteria in the system, leaving you more vulnerable to other infections.

- Stop smoking or vaping. Smokers and those with respiratory disease have a higher rate of serious illness and complications from coronavirus.

- Watch your diet. Stick to a healthful, balanced diet filled with lots of colorful fruits and vegetables to ensure you're getting enough zinc and vitamin D and other important vitamins and minerals. Because vitamin D deficiency is relatively common, experts do recommend supplementation if levels are low.

  - Eat plenty of plain yogurt every day. It helps to support the good bacteria that live in your body, which help to fight bad bacteria or viruses.

  - Foods that can help support the microbiome include garlic, onion, ginger, sauerkraut and fermented foods.

  - Minimize foods with sugar and trans fats, which aren't as nutrient-dense.

  - Your immune system needs fuel, so avoid ultra-low carbohydrate diets.

  - Drink lots of water and reduce alcohol consumption, which can disrupt your sleep.

Business Tips

What employers can and can't do

Personal travel

**Can employers cancel employees' vacation time and make them work instead?**

In most workplaces, yes. Vacation time isn't guaranteed under federal law. The exception is if an employee is covered by a union contract or specific employment agreement that includes certain time-off protections.

**Can employers require employees to cancel their personal travel plans.**

No. Employers can't dictate how employees spend their personal time.

**Do employers have to pay for an employee's canceled trip?**

Legally employers aren't required to pay unless an employment contract specifically calls for it.

Working remotely

**Do employees have the right to work from home?**

Employers generally don't have an obligation to allow telecommuting. An exception is an employee who qualifies under the Americans with Disabilities Act (ADA) to work remotely to accommodate a disability. Another might be if the government is ordering a quarantine. Then an employer could have more of a burden to allow remote work.

**Can employers require employees to work from home?**

Yes. Employers are within their rights to ask employees to work remotely, as long as they're not applying a policy in a way that could be deemed discriminatory.

**Aside from ordering them to work from home, can employers otherwise restrict employees movements?**

No. That said, an employer can offer recommendations to employees on how much to venture from home. Employers can educate and encourage, but they can't control.

On the job

If an employee's job requires a lot of close contact with many customers, can they refuse to perform their job because of the coronavirus outbreak?

Workers are protected from retaliation from an employer if they refuse to take on what they consider an unsafe work assignment. It becomes less straightforward, though, if a "reasonable" employee would otherwise deem the assignment safe.

Can employers require employees to go on business trips?

Employers can require employees to go on a business trip. However, making such an ultimatum is going to spread like wildfire through your organization. It could be a strategic mistake.

It could also be a legal mistake. In a case in Connecticut, the court indicated it could be illegal to require a worker to travel somewhere unsafe.

Can an employer take an employee's temperature at work?

Measuring an employee's temperature is usually beyond the bounds of what an employer can do or require. But in an especially severe or widespread influenza outbreak, such a check is permissible. That rule is likely to apply to a coronavirus epidemic.

But even if it's legal to take an employee's temperature, many lawyers and health experts don't think it's useful. Maybe the employee simply has the flu. And many people with the coronavirus have had no fever.

What if an employee ends up catching Covid-19 at work? Is the employer liable?

Unlikely — because it's usually hard to prove. It could be tough to determine exactly where someone contracted the virus, making it difficult to hold an employer responsible for medical costs.

Privacy

If an employer knows an employee contracted the virus, is the employer required to inform the infected employee's co-workers?

Generally, yes. Companies have an obligation to warn those who may have come in contact with someone diagnosed with Covid-19.

But it's not recommended that a company would identify the employee in question by name. That could violate confidentiality requirements under the ADA. Instead, employers might note that a staffer on a certain floor or part of the building contracted the virus.
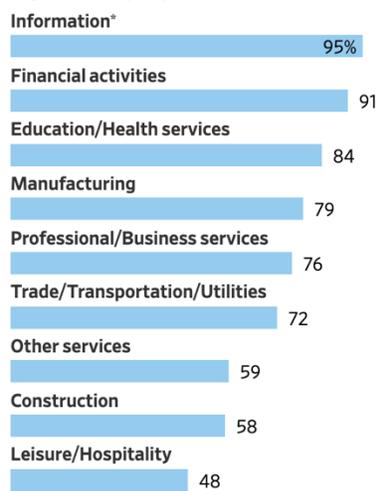
If employees come down with Covid-19, do they have to tell the employer? Can't they just say they need to take sick time and leave it at that?

There may not be a legal requirement, but there is an ethical one.

However, if the employee works remotely and has had no direct contact with colleagues, clients or other people through their job, though, such a disclosure may not be necessary

Re-evaluating sick time policies

Share of private sector workers with access to paid sick days, by sector

Information*
95%

Financial activities
91

Education/Health services
84

Manufacturing
79

Professional/Business services
76

Trade/Transportation/Utilities
72

Other services
59

Construction
58

Leisure/Hospitality
48

*Includes publishing, broadcasting and telecommunications
Source: U.S. Bureau of Labor Statistics, National Compensation Survey 2019

The incubation period for confirmed cases of coronavirus can be up to 14 days, a significant stretch of time to take off from work. Many jobs offer no paid sick leave at all. That means many workers may feel they have no choice but to come to work even when they are ill.

Adjusting policies

In 2019, more than 33 million U.S. workers had no access to sick leave. Many of them are food and cleaning staff who are more likely to get infected or be a vector for disease — and don't have the option of working from home.

Employees who went to work while sick with H1N1, also known as the swine flu, caused the infection of as many as seven million co-workers in 2009.

As the coronavirus outbreak intensifies, companies are rolling out special sick-time benefits to their workers, who number in the millions.

- Trader Joe's encouraged workers to stay home if they are sick, saying those days wouldn't come out of employees' paid sick-day bank. The move isn't a permanent change to policy, the company says.

- Walmart Inc. says it is waiving its attendance policy through the end of April, telling workers who are sick or feel uncomfortable coming to work to stay home using their paid time off. Any employees required to quarantine, either by Walmart or a government agency, will receive up to two weeks of pay. If a Walmart associate tests positive for coronavirus, that person will receive up to two weeks of pay. After that, if the employee can't work, that person may receive pay for up to 26 weeks, the company says.

- Darden, the Florida company that runs Olive Garden and LongHorn Steakhouse, says its 180,000 hourly workers would accrue one hour of paid sick time for every 30 hours worked. It is granting workers a bank of paid leave based on their most recent 26 weeks worked, and the benefit can be used immediately.

Share of U.S. workers with access to paid sick days by average number of days available
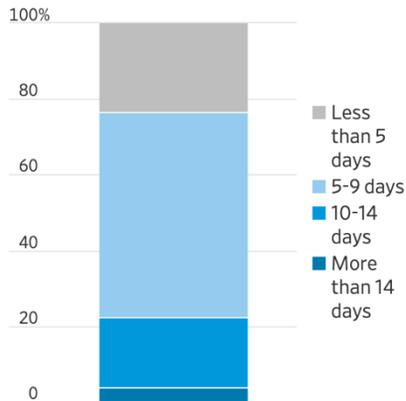
Note: Data are the average number of days off per year for private-sector workers with fixed-day sick leave plans after one year of service.
Source: U.S. Bureau of Labor Statistics, National Compensation Survey 2019

Different tiers

Paid sick time breaks down along wage lines. Among workers with salaries that put them in the top 10% of earners, 93% have paid sick days. For people who are in the bottom 10% of earners, that falls to 30%.

Even among workers with paid sick time, sick policies can vary significantly.

- 4% of U.S. private-sector workers with paid sick time have an unlimited number of days to use.
- 32% have days that can be used for any purpose, which can mean making the choice between taking a sick day or going on vacation.
- 65% are granted a fixed number of sick days a year.

And, with many white-collar workers, time off can vary based on an employee's relationship with a manager.

How to work from home: a checklist of the essentials

- Make sure you have all the tools you need: the right laptops, network access, passcodes and instructions for remote login.

- Minimize distractions and noises from others in your household. Separate your workspace from your personal space as much as possible. Use a pair of noise-canceling headphones to block out sounds. On conference calls, mute your microphone when you aren't speaking. When videoconferencing, be mindful of what the camera is picking up behind you.

- Use digital collaboration tools to communicate with colleagues. Schedule group meetings by videoconference and set up group chats via programs like Slack or Microsoft Teams. If email is leading to a misunderstanding, pick up the phone and have a conversation.

- Talk with your manager about child-care challenges. If you're asked to work from home and your children's school or day-care shuts down, that might affect your ability to do remote work during normal business hours. In some cases, children may be old enough to fend for themselves. But younger children will need more attention. One possibility might be to set up shifts at home, where one parent works remotely and the other parent cares for the child, and then they switch.

- Take steps to improve your internet speed. You may encounter slowdowns during periods of heavy use, like when you're trying to work from home while your children are watching videos or playing games. Switch to Ethernet if you can. If not, move as close as possible to your Wi-Fi router.

- Fight the feeling of isolation. While you want to minimize distraction from your family members or roommates, you also want to avoid feeling like you are completely alone all day. Maintaining social connection is tricky while trying to create social distance to stave off the virus. But there are ways to maintain your mental health: Call people on the phone or videochat, and break up the day with some exercise. Some employers have also begun offering online resilience training to address the challenges of working from home during the outbreak.