Associated Press

Coronavirus Topical Guide 2023

The coronavirus pandemic has killed millions and disrupted the lives and livelihoods of billions of people. When the World Health Organization first declared it to be an international crisis on Jan. 30, 2020, it hadn't yet been named COVID-19 and there were no major outbreaks beyond China. What followed were lockdowns, travel restrictions and vaccination campaigns to curb the spread. More than three years later, on May 7, 2023, the U.N. health agency said COVID-19 was no longer a global emergency but the pandemic wasn't over.

Here is updated guidance covering some key terms and points. Also see the Stylebook's Health and Science chapter.

---

coronaviruses (revised)

A family of viruses, some of which cause disease in people and animals, named for the crownlike spikes on their surfaces.

Coronaviruses can cause the common cold or more severe diseases such as *SARS* (severe acute respiratory syndrome) and *MERS* (Middle East respiratory syndrome). A new coronavirus first appeared in late 2019 in Wuhan, China. It causes a respiratory illness called *COVID-19*, which stands for coronavirus disease 2019.

The virus itself is named *SARS-CoV-2* but avoid using that name.

Referring to simply *the coronavirus* is acceptable on first reference in stories about the pandemic. While the phrasing incorrectly implies there is only one coronavirus, the meaning is clear in this context. Do not use the terms *new coronavirus* or *novel coronavirus*.

Common symptoms include fever, cough, breathing trouble, sore throat, muscle pain and loss of taste or smell. Most people develop only mild symptoms. But some people, usually those with other

medical complications, develop more severe symptoms, including pneumonia.

Sometimes people display no symptoms; others have symptoms that linger or return weeks or months after an infection (see long COVID entry).

The term *coronavirus* is generally acceptable in references to the pandemic: *coronavirus cases, coronavirus tests, coronavirus variants*. Use the term *COVID-19* when referring specifically to the disease: *COVID-19 treatments, COVID-19 patients, COVID-19 deaths, recovering from COVID-19*.

Passages and stories focusing on the science of the disease require sharper distinctions.

When referring specifically to the virus, *the COVID-19 virus* and *the virus that causes COVID-19* are acceptable, as is simply *the coronavirus*.

But, because *COVID-19* is the name of the disease, not the virus, it is not accurate to write *a virus called COVID-19*.

The shortened form *COVID* is acceptable in direct quotations and proper names.

---

antibodies (revised)

Substances that the body's immune system makes to fight off infection. Antibodies are also made in response to a vaccine.

A blood test for antibodies checks to see if someone has been infected previously. It's not ideal for detecting active or current infections; other types of tests are preferred for that.

---

anti-inflammatory

antiseptic, disinfectant

Antiseptics, such as hand sanitizers, are used to kill germs on living things. *Disinfectants*, such as bleach, are used on inanimate things, such as countertops and handrails. The adjective is *disinfectant*, not *disinfecting*.

antiviral (n., adj.)

No hyphen, an exception based on common usage to our general guidance to hyphenate *anti-* terms unless they have specific meanings of their own. Use *antiviral* in medical references: *an antiviral drug, antivirals to fight COVID-19*.

asymptomatic

Avoid this medical jargon; use *no symptoms, without symptoms* or the like.

cancel, canceled, canceling, cancellation

Centers for Disease Control and Prevention

Located in Atlanta, the Centers for Disease Control and Prevention is part of the U.S. Department of Health and Human Services. On first reference, use *Centers for Disease Control and Prevention*. Precede with *national, federal* or *U.S.* if needed for clarity. On second reference, *the CDC* is acceptable and takes a singular verb as does the full name.

comorbidity, comorbidities

Avoid use of this medical term, which means having two or more diseases or health conditions at the same time. The CDC says people with certain medical conditions like cancer and heart disease have an increased risk of serious illness from COVID-19.

---

contagion

Avoid this term. Usually better to use words like *disease* or *illness*, or more specific words like *virus*.

---

contact tracing (n., adj.)

The practice of tracking down and monitoring people who have been in close proximity with an infected person. Do not enclose in quotation marks. No hyphen in any use, including when used as a modifier: *The state's contact tracing efforts*. Consider rephrasing to avoid the term or for variety: *The state's efforts to identify people who have had close contact with the nursing home worker*.

---

curbside pickup (n.)

But *pick up* as a verb.

---

data

The word typically takes singular verbs and pronouns when writing for general audiences and in data journalism contexts: *The data is sound.* In scientific and academic writing, plural verbs and pronouns are preferred.

---

death, die

Don't use euphemisms like *passed on* or *passed away* except in a direct quote.

---

diseases

Do not capitalize diseases such as *cancer, emphysema, leukemia, hepatitis*, etc., but do capitalize the shorthand COVID-19, MERS, SARS. When a disease is known by the name of a person or geographical area identified with it, capitalize only the proper noun element: *Alzheimer's disease, Parkinson's disease, Ebola virus*, etc.

Avoid such expressions as: *He is battling COVID-19. She is a stroke victim.* Use neutral, precise descriptions: *He has stomach cancer. She had COVID-19*.

---

distances, time periods

Use numerals for distances: *Social distancing includes staying 6 feet away from other people*.

Spell out numbers under 10 when referring to days, weeks, months, years: *six months*.

---

distance learning (n., adj.)

Some schools used distance learning. *He took a distance learning class.*

---

doctor

Use *Dr.* in first reference as a formal title before the name of an individual who holds one of these degrees: doctor of dental surgery, doctor of medicine, doctor of optometry, doctor of osteopathic

medicine, doctor of podiatric medicine or doctor of veterinary medicine: *Dr. Anthony Fauci*.

The form *Dr.*, or *Drs.* in a plural construction, applies to all first-reference uses before a name, including direct quotations. Do not continue the use of *Dr.* in subsequent references.

Do not use *Dr.* before the names of individuals who hold other types of doctoral degrees. Instead, describe the person's expertise or credentials.

---

drive-thru

---

emergency use authorization

During a public health crisis, the U.S. Food and Drug Administration can use its emergency powers to allow the use of experimental drugs, tests and other medical products. It can waive its usual standards for studies on safety and effectiveness and require only that an experimental treatment's potential benefits outweigh its risks. It is not the same as full FDA approval and can expire after the public health emergency has ended. Avoid using the term *emergency use authorization* and the acronym *EUA*. Don't say *approved*. Instead, say for example: *The FDA allowed emergency use of Pfizer's vaccine*. See the **vaccine** section below for more. Regulatory agencies in other countries also have provisions for emergency use.

---

epidemic (n., adj.), pandemic (n., adj.), endemic (adj.)

An *epidemic* is the rapid spreading of disease in a certain population or region; a *pandemic* is an epidemic that has spread wider, usually to multiple countries or continents, affecting a large number of people. Follow declarations of public health officials in terminology. On March 11, 2020, the World Health Organization declared the COVID-19

outbreak a *pandemic*. Do not write *global pandemic*; the adjective is unnecessary as this pandemic is widely known to be global.

Endemic as an adjective refers to the constant presence of a disease. For example, malaria is endemic in some tropical regions. COVID-19 is still considered a pandemic. Health experts say the coronavirus is unlikely to go away, and they expect it to eventually become endemic. Do not use the phrase *an endemic*.

---

exposure

Contact with or close proximity to a harmful substance, such as the coronavirus, that can lead to infection or illness. People are tested for *infection* with the virus, not *exposure* to it.

---

front line(s) (n.) front-line (adj.)

---

hand-washing

---

health care

Two words in all uses.

---

herd immunity (revised)

Herd immunity occurs when enough people have immunity, either from vaccination or past infection, to stop uncontrolled spread of an infectious disease. It doesn't mean that a virus or bacteria is eradicated or that no person can get infected. Outbreaks can still happen even when a population has achieved herd immunity.

The threshold for herd immunity varies among different types of infectious diseases. For example, measles spreads so easily that an

estimated 95% of the population must be vaccinated to achieve herd immunity. Discussion of achieving herd immunity for the coronavirus largely ended as scientists learned how quickly it mutates.

---

natural immunity, hybrid immunity (revised)

As with many germs, prior infection with the virus that causes COVID-19 can provide important protection against a serious reinfection. How much immunity survivors have can vary depending on how long ago they were infected, how sick they were — and if the virus variant they had is very different from mutants circulating. Health authorities urge vaccinations even for people who recovered from COVID-19.

Studies show that COVID-19 survivors who get vaccinated develop extra-strong protection, what's called *hybrid immunity*. First, the vaccination acts like a booster and revs virus-fighting antibodies to high levels. Even more important, the combination also strengthens another defensive layer of the immune system, the so-called memory B cells, helping them to create new antibodies that are more likely to withstand future variants.

---

hot spot

---

hydroxychloroquine

A decades-old drug that is used to prevent and treat malaria and also to treat lupus and rheumatoid arthritis. It was used experimentally against COVID-19, but studies have shown it to be ineffective to treat or prevent coronavirus infection. The pill is sold as a generic and under the brand name *Plaquenil*. Chloroquine is an older, similar drug.

ICU

Acceptable on second reference for an *intensive care unit*. If *ICU* is used on first reference, give the full term quickly thereafter.

---

incubation period

Time between infection and the appearance of signs or symptoms of an illness. The incubation period for the coronavirus is thought to last up to two weeks. On average, symptoms show up four to five days later.

---

infectious disease (n., adj.)

No hyphen in the modifier: *an infectious disease specialist*.

---

isolation, self-isolation, quarantine

In common usage during the pandemic, the terms *isolation* and *quarantine* generally are used interchangeably.

The CDC makes this distinction: *Isolation* is separating sick people from healthy people to prevent spread of disease. For example, people believed to have COVID-19 or to have been exposed to the coronavirus are put in isolation in hospitals or are asked to isolate at home. *Quarantine* separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick. Webster's New World College Dictionary includes a broader use among its definitions of *quarantine*: any isolation or restriction on travel or passage imposed to keep contagious diseases, etc. from spreading.

---

ivermectin (revised)

A drug approved to treat conditions caused by parasitic worms. The FDA has not approved ivermectin as a COVID-19 treatment because studies have not proven it's effective.

---

lock down (v.), lockdown (n., adj.)

Spell out what is meant, because definitions and interpretations vary.

---

long COVID (revised)

A term used for long-term effects of COVID-19. Most people recover in a few weeks after infection. Others have symptoms that linger or return weeks or months, including fatigue, shortness of breath, "brain fog" and trouble sleeping. The condition is sometimes referred to as *long-haul COVID*. Avoid the medical term: *post-acute COVID syndrome*, or *PACS*, and avoid using *long-haulers* for people with the condition.

---

masks, respirators, ventilators

An *N95 mask* is a specific type of tight-fitting, cup-shaped face mask that covers the nose and mouth, filters the air, and is used by workers in such settings as construction and health care. They are technically *respirators*, but the preferred term is *masks* to avoid confusion with *ventilators*. *Respirators* like the N95 are distinct from *surgical masks*, which also cover the nose and mouth but fit loosely. A *ventilator* is a machine that helps people breathe; *breathing machine* is acceptable.

Generic masks are simply *face masks* or *masks*. *Mask* may be used as a verb, and often is used with the word *up*: *They are required to mask while in the building. We masked up and went for a walk*. And: *Mask-wearing and hand-washing are encouraged while social distancing*.

medical job titles

Avoid cumbersome or unfamiliar medical or scientific titles when possible. Describe someone's expertise instead. *Public health researcher* or *researcher* instead of *epidemiologist*. *Virus expert* instead of *virologist*. *Lung specialist* instead of *pulmonologist*. Use the proper job title if it is a government position: *state Epidemiologist Mira Sanchez*.

multisystem inflammatory syndrome in children (CDC term); multisystem inflammatory disorder in children and adolescents (WHO term)

Avoid both terms. Instead, use wording such as *a rare inflammatory condition* (or *syndrome*) *in children linked with the coronavirus*.

National Institutes of Health

This agency within the Department of Health and Human Services is the principal biomedical research arm of the federal government. *NIH* is acceptable on second reference. Both NIH and the full name take a singular verb. There are 27 institutes or centers, including the National Cancer Institute, the National Institute on Drug Abuse and the National Institute of Allergy and Infectious Diseases.

nonessential

patient

Implies someone is being or has been treated by a medical professional. The vast majority of people with the virus are not

hospitalized, and some may not seek out care, so avoid using *patients* to refer to all people with the virus.

---

pathogen

Avoid this term. Use *virus* or *bacteria*, as appropriate, or the generic/informal terms *germs* or *bugs*.

---

percent, percentage, percentage points

Use the % sign when paired with a numeral, with no space, in most cases: *The S&P 500 future contract was down 3.2% and the future for the Dow dropped 3.3%.*

In casual uses, use words rather than figures and numbers: *She said he has a zero percent chance of winning*.

At the start of a sentence: Try to avoid this construction. If it's necessary to start a sentence with a percentage, spell out both: *Eighty-nine percent of sentences don't have to begin with a number*.

Constructions with the % sign take a singular verb when standing alone or when a singular word follows an of construction: *The teacher said 60% was a failing grade. He said 50% of the membership was there*.

It takes a plural verb when a plural word follows an of construction: *He said 50% of the members were there*.

Use decimals, not fractions, in percentages: *Her mortgage rate is 4.5%*.

For a range, *12% to 15%*, *12%-15%* and *between 12% and 15%* are all acceptable.

Use *percentage*, rather than *percent*, when not paired with a number: *The percentage of people agreeing is small*.

Be careful not to confuse *percent* with *percentage point*. A change from 10% to 13% is a rise of 3 percentage points. This is not equal to a 3% change; rather, it's a 30% increase.

Usage: *Republicans passed a 0.25 percentage point tax cut*.
Not: *Republicans passed a 0.25 percentage points tax cut* or *Republicans passed a tax cut of 0.25 of a percentage point*.

---

personal protective equipment

Equipment worn to minimize exposure to hazards that cause serious injuries and illnesses. The shorthand *PPE* is acceptable on second reference.

---

preventive

---

reopen

---

risk

Relative risk is the risk of something happening to one group compared with the risk of it happening to another. This is often expressed in a fraction or ratio in scientific studies. If there is no difference, the ratio is 1. For example, if a study finds that the relative risk of a group of smokers getting a disease is 1.5 compared with a group of nonsmokers, it means the smokers are 1.5 times as likely — or 50% more likely — to develop the disease. But it doesn't say how likely it is that either group gets the disease. For that, you need *absolute risk*.

Absolute risk is the risk of something happening at all. For example, the nonsmoking group in the above example may have had a 4 in 100 chance of getting the disease, while the smokers had a 6 in 100 chance of getting a disease. Another example: A drug that extends life by 50% (a relative risk) sounds impressive, but that might mean living six months on average on a treatment versus four months without. Readers deserve both views of the results.

---

social distancing (revised)

No quote marks, no hyphen: *The CDC urged social distancing.* Generally, social distancing involves measures to restrict when and where people can gather. The goal is to stop or slow the spread of infectious diseases. Measures can include limiting the number of people who can gather, staying 6 feet away from others, closing schools, asking people to work at home, canceling events, limiting or shutting down public transportation, etc.

No need to define if the meaning is clear from the context. If specific steps are a focus, spell out what those steps are.

The shortened versions *distancing* or *distanced* are acceptable on second reference if clear in the context.

---

stay at home (v.), stay-at-home (adj.)

---

study phases

Drug studies usually are conducted in three phases in humans. In Phase 1, small numbers of people are given an experimental treatment to see if it's safe. In Phase 2, more people are treated to further test safety and determine appropriate dosages. Phase 3 studies are large tests of safety and effectiveness. It's often best to wait to report those results. For general audiences, avoid the term *phase*: call it *early-stage, mid-stage* or *late-stage testing* and

explain what is involved. If used in quotes, lowercase and use numeral: Phase 3, not Phase III.

---

shutdown (n.), shut down (v.)

---

superspreader (n., adj.)

An individual who spreads a virus or disease to an unusually large number of people, or a setting or event where an infection is spread to a large number of people: *a superspreader event*.

---

telecommute, telecommuting, telecommuter

---

teleconference, teleconferencing

---

telemedicine

---

testing (revised)

There are three broad kinds of coronavirus tests. Two diagnose an active COVID-19 infection; a third detects if someone previously developed an immune response due to infection or vaccination. The terms *coronavirus test* and *COVID-19 test* are interchangeable.

PCR test: The most sensitive coronavirus test, which usually needs to be processed in a laboratory. It looks for the virus's genetic material and then reproduces it millions of times until it's detectable with a computer. The test takes its name from this process, called a polymerase chain reaction, or PCR. The test is done with a nasal swab or sometimes saliva. Generally, referring to it as a *lab test* is sufficient; use *PCR lab test* or *PCR test* on first reference if needed.

rapid antigen test: This test looks for proteins found on the surface of the coronavirus, rather than the virus itself. The test isn't as sensitive as a lab test, but is cheaper, faster and can be done at home without special equipment. Some brands require small electronic machines. Rapid tests are usually done with a nasal swab and take about 15 minutes to yield results. Use *rapid test* or *home test*; avoid the term *antigen test*.

antibody test: A blood test that checks for antibodies to the coronavirus, a sign that a person had an infection in the past or got a vaccine to spur immunity. The test isn't used to diagnose active COVID-19 infections. Currently, antibody tests are mostly useful for researchers measuring what portion of the population was infected.

---

underlying conditions, preexisting conditions

Terms like *existing health conditions* or *other health problems* are preferred over *underlying conditions* to describe issues that might increase a person's risk of severe COVID-19 illness or death. No hyphen in *preexisting condition*, a term usually used in the context of health insurance.

---

videoconference, videoconferencing; video chat

---

virus's

The singular possessive form of *virus*. Not *virus'*. See possessives.

---

virus variant (revised)

Viruses often develop small changes, or mutations, as they reproduce. Some are harmless but others are more worrisome, especially if they make the virus more contagious or make people sicker. They also might curb the effectiveness of some treatments or vaccines.

Use *variant* or *version* to describe a new form of a virus in general. Following guidance from the World Health Organization, refer to specific variants by letters of the Greek alphabet as assigned by WHO. Avoid using country labels like *the South Africa variant*.

A variant known as omicron emerged in fall of 2021 and caused a huge surge in cases – in large part by evading immunity from vaccines and previous illness. Since then omicron has spawned a large extended family. Avoid using the scientific names for these descendants whenever possible (i.e., BA.5 or XBB.1.5) although sometimes they may be needed, such as when new types of vaccine boosters are introduced.

World Health Organization

The specialized health agency of the United Nations and is based in Geneva. It sets internationally accepted guidelines for treating diseases and coordinates responses to disease outbreaks globally. On second reference, *the WHO* and *WHO* are both acceptable.

VACCINES AND VACCINATIONS

vaccine (n.), vaccination (n.)

A *vaccine* is a product that stimulates the body's immune system to make antibodies and provide immunity against a specific virus or other germ. *Vaccination* is the act of giving a vaccine.

The terms are often interchangeable, since a person is receiving the *vaccine* while getting a *vaccination*. Use the term *vaccination* if needed to be specific about the act of giving or receiving the shot: *the city's vaccination schedule*, for example. The terms *immunization* and *vaccination* can generally be used interchangeably.

Don't refer to a *vaccine* as a *drug, medicine* or *serum*.

Coronavirus vaccines are made in a wide variety of ways. It's not necessary to include the type of vaccine, unless relevant, in most stories. Use the manufacturer's name if needed to distinguish between vaccines. (See below.)

Do not say *anti-COVID-19 vaccine* or *anti-coronavirus vaccine*. Instead: *COVID-19 vaccine* (or *vaccination*) or *coronavirus vaccine* (or *vaccination*). The terms *COVID-19* and *coronavirus* are both acceptable as a modifier for the vaccine or vaccination.

The COVID-19 vaccines authorized for use in the U.S. were tested in tens of thousands of people and proven to be both safe and effective at dramatically reducing the risk of serious disease and death. Real-world use plus extra government safety tracking have made clear that serious side effects are extremely rare — and that any risk is far lower than the risks posed by COVID-19.

Avoid the shorthand *vax* or *vaxxed*.

---

vaccine names (updated)

Use the manufacturer's name to refer to a specific vaccine. For example, Pfizer, AstraZeneca, Moderna, Novavax, Sinopharm, Sinovac, CanSino and Johnson & Johnson (J&J on second reference.)

Exceptions: Sputnik V, from Russia's state-run Gamaleya Center and Covaxin (not COVAXIN) from Bharat Biotech in India.

Development of some vaccines involved a partner. Include a mention of the partner when relevant: Germany's BioNTech for Pfizer; Oxford University for AstraZeneca; and U.S. National Institutes of Health for Moderna.

Do not use Pfizer-BioNTech or AstraZeneca-Oxford construction. Johnson & Johnson's vaccine was developed by its Janssen

Pharmaceuticals unit, but refer to the vaccine solely as Johnson & Johnson or J&J. The J&J vaccine is no longer available in the U.S.

AstraZeneca has partnered with the Serum Institute of India to make its vaccine. Use AstraZeneca for those doses; not the local name, Covishield.

Some vaccines have a brand name (Pfizer's is Comirnaty). Avoid since they are not in wide use.

---

vaccine approval (revised)

Be careful in describing a vaccine's regulatory approval status, which can vary country to country. Many regulatory agencies allowed vaccines to be used on a temporary, emergency basis. Describe them as *authorized for emergency use; allowed for emergency use; given the green light*, etc. Avoid saying a vaccine was *approved*, until full, final approval has been granted by a regulatory agency. Until then, the vaccines are still considered experimental.

---

vaccine side effects

Use caution in reporting on any side effects. Most drugs and vaccines have side effects. Typical side effects for vaccines include things like a sore arm from the shot, fever and muscle aches. Allergic reactions and more serious side effects are rare. Just because someone has a health problem shortly after getting a vaccine doesn't mean the vaccine is the cause; it may be coincidental. And some reactions may be to other chemicals in the vaccine solution, not the vaccine itself.

"vaccine passports"

Digital or paper documents showing that a person has been vaccinated against COVID-19. Some workplaces, governments and

private venues require such proof. The term is acceptable, enclosed in quotation marks. But *proof of vaccination* is better.

---

anti-vaxxer (revised)

Do not use this imprecise label for someone who opposes or is hesitant about vaccinations. Instead, be specific about a person or group's position. For example, *people who oppose all vaccines* or *people who are hesitant about the COVID-19 vaccines*, or other variations, depending on the specifics of the circumstances.

The term is acceptable in direct quotations if necessary. If the quotation is about a specific group, person or people, include more detail about their position or views.

---

breakthrough infection (revised)

An infection that occurs in a person who is up to date on vaccinations. COVID-19 vaccines are very effective at preventing severe disease and death. But like all vaccines, they are not 100% effective at preventing infection. It's still possible to get infected with mild or no symptoms, or even to get very sick. Experts say the shots help reduce the severity of any illness and greatly reduce the chance of spreading the virus.

---

booster (revised)

An extra dose or shot of vaccine given after initial vaccination is completed, intended to boost waning immunity. COVID-19 vaccines continue to offer protection against severe disease but that protection is strongest after an updated booster.

COVAX

Acceptable on all references for an international cooperative program formed to make sure low- and middle-income countries have fair access to COVID-19 vaccines.

COVAX is led by the United Nations' World Health Organization; Gavi, a vaccine group; and the Coalition for Epidemic Preparedness Innovations.

The group negotiates contracts with vaccine companies. Some member countries buy them, others get them for free thanks to donor countries and charities.

COVAX stands for *COVID-19 Vaccines Global Access Facility*. Unless necessary, do not use the full name, which suggests a building. Do not use *COVAX facility*.

---

fetal tissues explanation

Researchers and pharmaceutical companies often use what are called "immortalized cell lines" created decades ago using fetal tissue, to test or produce many types of medicines and vaccines. Clones — not the original tissue — continue to grow in the laboratory.

These cell lines are not used to produce the mRNA COVID-19 vaccines from Pfizer and Moderna. The cell lines, but no fetal tissue, were used in some early lab testing of the vaccines.

COVID-19 vaccines from Johnson & Johnson and AstraZeneca are made using types of a harmless cold virus called an adenovirus. The virus is grown in a cell line, not in fetal tissue. The virus is extracted and purified so none of those cells remain in the vaccines.

---

fully vaccinated (revised)

U.S. health officials no longer use this term for vaccination status, but recommend that people be up to date on vaccinations, which can vary from person to person depending on age, health and brand of vaccine.