NIH Style Guide

Contents

2

Introduction

The *NIH Style Guide* is intended for use in writing web content, fact sheets, brochures, newsletters, and other promotional materials. NIH follows the [Associated Press (AP) Stylebook](#) for news releases and other media products. For items not covered by this guide, please refer to [HHS' style guide](#) and AP. Whenever we diverge from HHS or AP's guidance, it is explicitly stated in the style guide.

As language evolves, so will this style guide to reflect current best practices.

Open and read the links to the AP Stylebook found in many entries; the AP guidance for that topic is primary and anything included here is *in addition* to AP or providing additional context.

The AP Stylebook is now available to all NIH staff when on the NIH network or VPN through a [custom link](#), thanks to the [NIH Library](#).

Note that this style guide is not intended for scientific publications, which typically follow the American Medical Association, the National Library of Medicine, and other styles.

Other resources:

1. [Plain Language](#): The Plain Writing Act of 2010 (Public Law 111-274) aims to improve clarity and simplicity in government communication. The law requires federal agencies to use clear language that the public can understand and use.
2. [Science, Health, and the Public Trust webpage](#): Provides guidelines on communicating science and health research to the public. Be sure to reference the [Understanding Clinical Studies](#) page when writing about studies and clinical trials.
3. [NIH Spanish Style Guide](#): Provides best practices for communications professionals who translate and write Spanish health, science, or clinical research materials.
4. [NIH Executive Secretariat Style Guide](#): Provides guidance for controlled correspondence.
5. [List of NIH grant types.](#)
6. [PubMed](#) and [PubMed Central](#): Provides information on the National Library of Medicine (NLM) style for journal abbreviations, date formats, page numbers, and authors, as well as other styles.
   a. PubMed is a database hosted by NLM that contains more than 34 million biomedical literature citations and abstracts.
   b. PubMed Central (PMC) is a digital archive hosted by NLM containing millions of freely accessible, full-text biomedical and life sciences journal articles.
   c. These resources are scientific literature databases offered to the public by NLM. NLM is not a publisher, but rather collects, indexes, and archives scientific literature published by other organizations. The presence of any article, book, or document in these databases does not imply an endorsement of, or concurrence with, the contents by NLM, NIH, or the U.S. Federal Government.
7. [CDC's Health Equity Guiding Principles for Inclusive Communication](#): Provides guidance for health communicators to ensure their communication products and strategies adapt to the specific cultural, linguistic, environmental, and historical situation of each population or audience of focus.
8. [Section508 Guide to Accessible Web Design and Development](#): Provides guidance for developers, designers, and content creators to ensure that federal websites and digital products meet the [Revised 508 Standards](#), part of Section 508 of the Rehabilitation Act of 1973.

NIH

Accelerating Medicines Partnership®

When using the Accelerating Medicines Partnership® and AMP® names, add the superscript registered R symbol in the first usage on a webpage or print product. For subsequent references, use the abbreviation AMP without the registered R symbol.

When the registered services marks are used, the website or material in which they appear should include this attribution statement in a footer on the homepage or at the end of the material: "ACCELERATING MEDICINES PARTNERSHIP® and AMP® are registered service marks of the U.S. Department of Health and Human Services."

When the marks are used in text (e.g., in sentences and paragraphs), use the marks as an adjective, not as a noun. For example: "The Accelerating Medicines Partnership® Program for Alzheimer's Disease (AMP® AD)."

Acting (as a job title)

While AP does not capitalize *acting* as a job title, Acting is a term of law when applied to a person holding an HHS position because an acting holder of a position can have different levels of responsibility than a permanent appointee.

Acting should be capitalized as part of a formal title if a person is officially named to that job. Similarly, if a person is not officially named as acting holder of a position, avoid using it entirely. When acting is part of a job title, include it right before the job title and not after the title in parentheses. *Correct:* Acting NIH Director. *Incorrect:* NIH Director (Acting).

Abbreviations, initialisms, and acronyms

Always write out the full name and only include the abbreviation in parentheses after the first reference if the name is referenced again in the story, e.g., the Office of Extramural Research (OER). Abbreviations can be used for all subsequent references on the same webpage or document. Do not list an acronym or abbreviation when something is mentioned only once in a story.

If writing for an internal audience, NIH can be used without spelling out on first reference.

Follow AP style and use as few abbreviations, initialisms, and acronyms as possible, especially when they are less well known. Many people recognize FDA, but few people will quickly recognize the abbreviated form of a specific working group within an NIH institute. For the latter, using the full name is better even on the second reference, or use a short, contextual reference like "the working group."

When a name is long and cumbersome and may not be recognized, this form is acceptable: *to discover the LINGO-2 protein (short for leucine-rich repeat and immunoglobin-like domain-containing interacting protein–2).*

Some abbreviations, such as HIV or AIDS, are so familiar that they do not need to be spelled out.

The NIH intranet page has a list of [Commonly Used Acronyms and Abbreviations](#).

Agency names and articles

Do not use *the* before the acronym NIH (or other ICO acronyms) unless it is in front of a proper noun. For example, write "The letter was addressed to NIH" instead of "The letter was addressed to the NIH." However, you would write "The NIH BRAIN Initiative signals a paradigm shift for neuroscience" and "The NIH director's research priorities."

When NIH or an ICO acronym is used as a noun, *the* is not needed. For example, "NIH is the nation's leading biomedical research institution," or "Today, NIH announced…"

For other agencies, it varies. Use *the* before the agency name if the agency commonly is known by that usage. AP commonly uses *the* before FDA (e.g., "The FDA announced…"). *The* does not typically precede initials of less well-known agencies, such as AHRQ.

Use *an* before abbreviations like NIH where the initial sound is a vowel sound. For example, "an NIH grant" or "an FOA."

When *U.S.* is part of a department or agency's official name, include it on the first reference. For example, *U.S. Department of Health and Human Services, U.S. Food and Drug Administration*, but not before the *Centers for Disease Control and Prevention*.

ClinicalTrials.gov

ClinicalTrials.gov is a database hosted by NLM of privately and publicly funded clinical studies conducted around the world. It is the world's largest clinical trial registry and results database.

Never use CT.gov, which links to Connecticut's official state website.

Clinician-scientist

Clinician-scientists are scientists with professional degrees who have training in clinical care and are engaged in independent biomedical research. Clinician-scientists can be dentist-scientists or nurse-scientists, for example, while *physician-scientists* have an M.D. or D.O. degree. When writing for the public, define the term after the first use.

Drug names

At first mention, give the nonproprietary (generic) drug name followed by the drug's brand name if there is only one in parentheses, such as "imatinib (Gleevec)." Exclude brand name with generic drugs with multiple brands. Do not capitalize the generic names of drugs. Use an initial capital for the brand name and omit trademark symbols (® and ™). For subsequent mentions, use the nonproprietary drug name unless there is a specific need to refer to a brand name.

Early career scientists

Early career scientists are about to transition, or have recently moved, to fully independent positions as investigators, faculty members, clinician scientists, or scientific team leaders in

industry. Early career scientists focus on establishing themselves as the experts in their chosen research areas.

They are also referred to as *early career researchers* or *early career investigators.* Do not use the term *young scientists.* A hyphen is not necessary following the word *early*; you do not use a hyphen in compound modifier when the first word ends in *-ly.*

An *early stage investigator (ESI)*, however, has a more narrow definition. An ESI is a program director / principal investigator (PD/PI) who has completed their terminal research degree or end of post-graduate clinical training (whichever date is later) within the past 10 years and has not previously competed successfully as PD/PI for a substantial NIH independent research award.

Foreign influence vs. inappropriate foreign government interference

When referring to international risks or threats to U.S. biomedical research integrity and security, use *inappropriate foreign government interference* instead of *foreign influence.*

See Protecting U.S. Biomedical Intellectual Innovation for more information.

Grant

Only capitalize grant when it is part of a proper noun, like a formal title.

NIH grant program names combine one letter and two numbers. Research grants start with *R*, career-development awards start with *K*, research training grants start with *T*, fellowships start with *F*, program project and center grants start with *P*, and cooperative agreements start with *U.*

Use the term *recipient* instead of *grantee* or *awardee* when referring to grant recipients. NIH makes grants to institutions and organizations, not individuals (with the exception of certain career development grants).

NIH mechanisms refer to the various types of funding mechanisms NIH uses to support research, both extramurally (grants, contracts, and other transactions) as well as intramurally on our campuses. *R01, R21, U01,* are examples of grant types, or activity codes, and not *NIH mechanisms.*

Reference the Types of Grant Programs page for more thorough descriptions.

Humans and other animals

Write *humans and other animals* instead of *humans and animals* because humans are animals.

Intramural Research Program

The *Intramural Research Program (IRP) r*efers to the internal research program at NIH. The Office of Intramural Research oversees the policies and processes that govern the IRP. Many ICs use *Division of Intramural Research* to refer to their IC's IRP.

Intramural research activities are conducted by individuals with a specific type of NIH appointment called an *Intramural Professional Designation*, as well as by those who provide direct support to their research efforts.

The term *intramural* should only be used to refer to individuals and research within the IRP. *Intramural* should not be used for activities being performed or overseen by Office of Extramural Research or the Office of Management.

MedlinePlus

MedlinePlus is an online health information resource hosted by NLM. It presents high-quality, relevant health and wellness information that is easy to understand in both English and Spanish.

MedlinePlus is one word in camel case, with no space between *Medline* and *Plus.* Camel case is writing phrases without spaces or punctuation and indicating the separation of words with a single capitalized letter. Never use Medline, Medline+, or M+.

NIH HEAL Initiative®

On first reference, both registered service marks should appear: Helping to End Addiction Long-term® Initiative, or NIH HEAL Initiative®.

On subsequent references, write either *the NIH HEAL Initiative* (without the registered R symbol) or *the initiative* (lowercase, no initial capitalization).

Do not write NIH HEAL (Helping to End Addiction Long-term) Initiative® or NIH Helping to End Addiction Long-term (HEAL) Initiative.

When the registered service marks are used, the website or material in which they appear should include this attribution statement in a footer of the homepage or at the end of the material: *NIH HEAL Initiative and Helping to End Addiction Long-term are registered service marks of the U.S. Department of Health and Human Services.*

NIH institutes, centers, and offices

NIH is made up of 27 Institutes and Centers (ICs) and many policy and program offices within the Office of the Director (OD). When referring only to institutes and centers, use the abbreviation ICs on subsequent references. When referring to ICs and OD offices, use ICOs on subsequent references (e.g., "All ICO directors have reviewed this report").

Only use an apostrophe with the abbreviation ICs if it is possessive, e.g., "the ICs' research priorities." Note that the apostrophe would always go after the *s* because ICs is plural. If it were a single institute or center, you would not need to use the abbreviation. Do not put an apostrophe between IC and the letter *s* when it is simply a plural noun. *ICs* is correct.

The words institute, center, and office are not capitalized when used generally. Only capitalize them when used in their title, e.g., *The National Cancer Institute*, or *The Office of Science Policy*. Capitalize Institutes and Centers if writing about the collective 27 and capitalize Institutes, Centers, and Offices if writing about all ICs and OD offices.

For example, use lowercase for *institute* in subsequent references if not using the acronym: "*The National Cancer Institute is the federal government's principal agency for cancer research and training. The institute…*"

When writing for the public, lead with the largest overall organization: NIH. In subsequent references, cite the next largest: IC or OD office. Avoid individual lab/office/unit names; that level of detail is unnecessary and may confuse the media and the public. Remember your audience; it is not the scientist or the lab members. For example, an NIMH clinical scientist might be identified simply as "Dr. Sue Smith, a mental health researcher at the National Institutes of Health" on first reference. On the second reference you could reference the National Institute of Mental Health.

For directors and deputy directors of ICOs, use their official title and include the ICO name.

Specific ICO naming conventions

All of Us Research Program

The *All of Us* Research Program always has *All of Us* in italics and can be shortened to *All of Us* or the program in subsequent references.

Eunice Kennedy Shriver National Institute of Child Health and Human Development

The official name for NICHD is the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, with *Eunice Kennedy Shriver* in italics. The acronym remains NICHD.

Fogarty International Center

John E. Fogarty International Center is the official name, but it is rarely used. The preferred, commonly used name is Fogarty International Center. For subsequent references, use Fogarty instead of FIC.

National Heart, Lung, and Blood Institute

This institute name contains two commas. Pay attention to punctuation when writing out the full name.

NIH-wide vs. trans-NIH

To avoid confusion, the term *NIH-wide* is preferrable to *trans-NIH,* unless part of a formal name, e.g., Trans-NIH ME/CFS Working Group. If referring to an NIH initiative that involves two or more institutes, but not all of NIH, you can refer to it as a *multi-institute program*, list the institutes, or write "this program has input from five NIH institutes."

Nonhuman primates

Write *nonhuman* as one word, not *non-human* or *non human.* As in, nonhuman primates.

Official titles (director, senator, ambassador, president)

Capitalize official titles in NIH writing, whether it is before or after a name. This is a divergence from AP style. Do not capitalize general or informal references to titles, such as *grants management specialists.*

Examples:
1. Dr. Gary Gibbons, Director of the National Heart, Lung, and Blood Institute (NHLBI)
2. NHLBI Director Gary Gibbons, M.D.
3. Today, IC *grants management staff* have a new tool in their arsenal
4. New guidelines have been implemented for *review staff* who monitor XYZ grant applications.
5. NIH ICs are hiring *health scientist administrators*, *grants management specialists*, *program analysts*, *data scientists*, and more.

Patents

American Medical Association style for referencing a patent:
Inventor last name, First initial. (Year). Title of patent (Country/Region Patent No. Number). Issuing Body. URL

A quick reference can be in this format: U.S. patent 5,0621,620

Physician-scientist

Physician-scientists are medical doctors who are engaged in independent biomedical research. They are also referred to as *M.D./Ph.D.s* and *clinician-scientists,* but when the scientist does not have an M.D./D.O. degree, they should be referred to as a *[clinical specialty]-scientist* or as a *clinician-scientist*; not as a physician-scientist. When writing for the public, define the term after the first use.

Possessive apostrophe and institute names

When indicating possession, add an apostrophe s to the end of the institute acronym: *NHLBI's research.* When an ICO ends in the letter s, simply add the apostrophe and not apostrophe s. For example, NINDS' not NINDS's, *All of Us'* not *All of Us's.*

Postbacs

A *postbac* (short for postbaccalaureate) is a recent college graduate with a bachelor's degree who has come to NIH to spend a year or two doing biomedical research. Write *postbac* as one word, not *post-bac*, and if writing for the public, write out *postbaccalaureate trainee* and include *postbac* in parentheses after the first reference. *Postbac* can be used for all subsequent references on the same webpage or document.

Postdocs

A *postdoc* (short for postdoctoral) is someone with a doctoral degree (Ph.D., M.D., D.D.S., or the equivalent) who is engaged in a temporary period of mentored research or scholarly training to acquire the professional skills needed to pursue a certain career path. Write *postdoc* as one

word, not *post-doc*. If writing for the public, write out *postdoctoral trainee/fellow*, as appropriate, and include *postdoc* in parentheses after the first reference. *Postdoc* can be used for all subsequent references on the same webpage or document.

Program titles

Capitalize names of programs when mentioned formally; lowercase when referred to generically.

Examples:
1. NIH provides an array of *career development and training* to trainees at the undergraduate, graduate, and postdoctoral levels. One of these is the *Mentored Patient-Oriented Research Career Development Award*. This *award* provides support for the career development of clinically trained professionals who have made a commitment to patient-oriented research.
2. The NIH Office of Extramural Research holds its *Virtual Seminar on Program Funding and Grants Administration* annually. The *virtual seminar*, which draws people from across the globe, demystifies the application and review process, clarifies federal regulations and policies, and highlights current areas of special interest or concern.

Titles and degrees

Doctor is a title applying to those who hold advanced degrees (e.g., Ph.D., D.D.S, D.V.M.). *Physician* refers to a Doctor of Medicine (M.D.).

Do not use the title (Dr.) and the degree (Ph.D., M.D.) together. Always use periods in the degree abbreviations as shown below.
> *Incorrect:* Dr. Francis Collins, M.D., Ph.D.
> *Correct:* Dr. Francis Collins
> *Correct:* Francis Collins, M.D., Ph.D.

Identify people with their full name and degrees on first reference, then Dr. Last name in all other references. This is a divergence from AP style.

List higher degrees first, in this order: M.D., D.D.S., D.V.M., Sc.D., J.D., Ph.D., Dr.P.H., and D.Phil.

Add a comma between last name and each degree, and after the last degree in a series (e.g., John Smith, M.D., Ph.D., will speak at the conference.).

Do not use periods for postnominal titles (office or honor) or nonacademic degrees that show membership in an organization, such as CDE, FACEP, FAAFP, FAAP, FACP, FACS, or FACE.

Government

Advisor

Write *advisor* not *adviser.* As in, Senior Advisor. This is a divergence from AP style.

Agency, agencywide, interagency

Only capitalize *agency* when it is part of an official agency name, e.g., the Environmental Protection Agency.

Agencywide is one word, no space or hyphen. It refers to anything that extends or exists throughout an entire agency.

Interagency is one word, no hyphen needed. It refers to something occurring between or involving two or more agencies.

Appropriation, appropriations, authorization

An *appropriation* is a law of Congress that provides an agency with budget authority.

Appropriations are the funds — either definite (a specific sum of money) or indefinite (an amount for "such sums as may be necessary").

Authorization is an act of Congress that permits a federal program or activity to begin or continue from year to year. It sets limits on funds that can be appropriated but does not grant funding which must be provided by a separate congressional appropriation.

Calendar year

The *calendar year* is January 1 through December 31. This term is often used to differentiate from the fiscal year and is sometimes shortened to CY. Generally, we should not use this acronym for NIH writing because it will only confuse the reader. Write with the assumption that the calendar year is the default.

Congress, congressional

Always capitalize *Congress* when referring to the U.S. House and Senate together. The adjective *congressional* is lowercase. Congressional Justification is the name of a recurring report; do capitalize congressional when it is part of a proper noun, like the name of a report.

Country names

Use a country's name, not the adjective, as a subject, except when modifying the word *government* (e.g., "we hope France will sign the resolution" or "we hope the French government will sign the resolution," not "we hope the French will sign the resolution").

Use both country names when referring to two countries (e.g., U.S.-India relations, not U.S.-Indian relations).

Use the pronoun *it* and the relative pronouns *which* or *that* for a country, not *he/she* or *who. Who* refers to people; *that* refers to things.

Federal

Only capitalize federal when it is part of a proper noun, like the Federal Register or the Federal Bureau of Investigation. General references to federal employees or federal laws, for example, should remain lowercase.

Fiscal year

The federal government's fiscal year begins on October 1 and ends on September 30 of the following year. When referencing the fiscal year, write it out the first time and then reference it by the acronym FY in subsequent references (e.g., "In Fiscal Year 2022 (FY22), we received x amount of funds"). Write the acronym with no spacing between FY and the last two digits of the year (FY21, FY22), and not FY 2021, FY 2022 with a space and the full year.

To avoid confusion, always use the term fiscal year and not budget year.

Health care

AP style is two words, not *healthcare*, even as a compound modifier (e.g., health care overhaul). Exceptions: The Agency for **Healthcare** Research and Quality uses one word. **HealthCare**.gov uses camel case.

Nationality and citizenship

Avoid using *citizen* as a generic term for people who live in the United States. How you refer to the public is largely dependent on context. *People, the public,* or *users* could all be appropriate.

Citizens should be used for information directly related to U.S. citizenship, such as when describing who is eligible to vote in federal elections.

Medical Language
Commonly misspelled names

For a more thorough compilation of eponymous disease names with proper punctuation and spelling, please see the National Human Genome Research Institute's [Genetic Disorders page](#).

Alzheimer's disease

Not Alzheimer disease. Use *Alzheimer's disease* on the first reference; just *Alzheimer's* (without the word "disease") is acceptable for subsequent references on the same webpage or document. The abbreviation AD is acceptable on second reference if it is used along with the first reference: Alzheimer's disease (AD).

Amyotrophic lateral sclerosis

Amyotrophic lateral sclerosis (ALS) was once commonly known as Lou Gehrig's disease, after the famous ballplayer in the 1940s who retired because of the disease. NIH doesn't refer to *Lou Gehrig's disease* in our web content. You may write "also known as Lou Gehrig's disease" when writing resources intended for the public, e.g., MedlinePlus. (Some people's only point of reference to the disease may be through the name Lou Gehrig's).

Creutzfeldt-Jakob disease

Not Creutzfeldt-Jakob's disease.

Crohn's disease

Not Crohns disease, Crohn disease, nor Crohns' disease.

Down syndrome

Not Down's syndrome nor Down's.

Down syndrome is a condition or a syndrome, not a disease. People have Down syndrome; they do not *suffer from* it and are not *afflicted by* it. Use person-first language: *a child with Down syndrome*.

Graves' disease

Not Grave's disease.

Hashimoto's disease

Not Hashimotos disease or Hashimoto disease.

Hodgkin lymphoma and non-Hodgkin lymphoma

Not Hodgkin's lymphoma.

Mpox

[AP Stylebook: mpox](#)

Not monkeypox or monkey pox. *Mpox* is not capitalized unless it begins a sentence.

Myalgic encephalomyelitis/chronic fatigue syndrome

Myalgic encephalomyelitis/chronic fatigue syndrome, commonly known by its abbreviation ME/CFS, is often misspelled, and sometimes referred to as "chronic fatigue," which is a symptom but not the name of the disease. *Myalgic encephalomyelitis/chronic fatigue syndrome* is not capitalized unless it begins a sentence.

Parkinson's disease

Not Parkinson disease. Use *Parkinson's disease* on the first reference and then the acronym PD for subsequent references. *Parkinson's* without the word "disease" is rarely used in NIH writing but is acceptable.

COVID-19

COVID-19, SARS-CoV-2 coronavirus

[AP Stylebook: coronaviruses](#)

COVID-19 (coronavirus disease 2019) is an infectious disease caused by the SARS-CoV-2 virus. Use COVID-19 when referring to the disease and *SARS-CoV-2*, or *SARS-CoV-2 virus,* when referring to the virus itself. Do not use *coronavirus* to refer to the disease or as a synonym for COVID-19. Always capitalize all the letters in COVID-19 (not Covid-19 or covid-19).

Coronaviruses are a large family of viruses that usually cause mild to moderate upper-respiratory tract illnesses in humans. However, three coronaviruses have caused more serious and fatal disease in people: SARS-associated coronavirus, MERS-CoV virus, and SARS-CoV-2.

PASC, Long COVID, MIS-C

PASC stands for *post-acute sequelae of SARS-CoV-2* and is a term that scientists are using to study the potential consequences of a SARS-CoV-2 infection.

One of these consequences is referred to as *Long COVID* — when COVID-19 symptoms last weeks or months after the acute infection has passed. Do not use the term *long-haulers* when referring to people who have Long COVID. *PASC* and *Long COVID* are not interchangeable terms.

Multisystem inflammatory syndrome in children (MIS-C) is a condition in which different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. The cause of MIS-C is not yet known, but many children who develop MIS-C previously had COVID-19.

Vaccine hesitancy vs. anti-vax

[AP Stylebook: anti-vaxxer](#)

Use *vaccine hesitant*, *vaccine hesitancy,* or *someone opposed to vaccines* instead of *anti-vaxxers, anti-vax*, or *anti-vaccine*. If necessary in a direct quote, explain it.

Diabetes

Blood glucose vs. blood sugar

Use *blood glucose* instead of *blood sugar*. On first mention of blood glucose, you may include "also called blood sugar," offset by commas.

Hypoglycemia

Hypoglycemia, also called low blood glucose, occurs when the level of glucose in your blood drops below what is healthy for you. Low blood glucose should follow hypoglycemia, set off with commas. Use hypoglycemia on first reference.

Avoid describing blood glucose as *too low* or *normal*. Preferred terms are *low for you* or *below what is healthy for you*.

> Example: Your number might be different, so check with your doctor or health care team to find out what blood glucose level is low for you.

Insulin

Use *take insulin* instead of *use insulin* when writing about a person administering or injecting insulin into the body.

Prediabetes

Always list diabetes first when listing diabetes and prediabetes.

Type 1 and type 2 diabetes should be lowercase unless beginning a sentence, per the American Diabetes Association.

Person-first and Destigmatizing Language

Person-first language is a way to emphasize the person and view the disorder, disease, condition, or disability as only one part of the whole person. Describe what the person "has" rather than what the person "is." Person-first language avoids using labels or adjectives to define someone, e.g., *a person with diabetes* not *a diabetic;* or *person with cancer* not *cancer patient;* or *a person with bipolar disorder* not a *person who is bipolar*.

Some communities, however, prefer identity-first language because they consider some characteristics as inseparable parts of their identity. Those who prefer identity-first language consider it a way to show pride in who they are and their membership in a community of similar people. The deaf and autistic communities, for example, often show a strong preference for identity-first language. When possible, ask if a person or group uses identity-first language (*deaf students*) or person-first language (*students who are deaf*). If the preference is not known, err on the side of person-first language. For example, always use person-first language for children; identity-first language is chosen.

See the CDC's Health Equity Guiding Principles for Inclusive Communication and the NIH article Writing Respectfully: Person-First and Identity-First Language for more on person-first language and other inclusive principles.

Brain injury vs. brain-damaged

AP Stylebook: Brain injury

A traumatic brain injury (TBI) can be caused by a forceful bump, blow, or jolt to the head or body, or from an object that pierces the skull and enters the brain.

A traumatic brain injury should not be referred to as a *head injury*, which should be reserved for cases where the head is injured without damaging the brain.

Blind

AP Stylebook: Blind

The National Center on Disability and Journalism (NCDJ) says to use the term *blind* to describe someone with complete loss of sight. Use *legally blind* to describe someone with "almost complete loss of sight." Another option is *low vision*. NCDJ recommends against using the term *visually impaired*. Ask your source what they prefer and if they prefer identity-first (blind students) or person-first (students who are blind) language.

Caesarean delivery vs. c-section

Use *caesarean delivery*, *caesarean birth*, or *abdominal delivery* instead of *caesarean section* or *c-section.*

Caregiver, care partner vs. caretaker

Use *caregiver*, rather than *caretaker*, to describe people providing care. The term *caretaker* generally refers to a person who takes care of something, such as a house, when the owner isn't present.

Both *caregiver* and *care partner* are acceptable but consider the situation and individual's preference before choosing a term. A caregiver provides care for someone who cannot care for themselves. A care partner is a partner in care, and this term is sometimes preferred to show that the person with the disease is able to care for themselves with some assistance.

Deaf

[AP Stylebook: Deaf](#)

According to [NCDJ](#): "*Deaf* and *hard of hearing* became the official terms recommended by the World Federation of the Deaf in 1991. Many people in the Deaf community prefer the use of the lowercase 'd' to refer to audiological status and the use of the capital 'D' when referring to the culture and community of Deaf people." Always ask your source what they prefer; some deaf people do not consider themselves to be a part of the Deaf community.

Avoid the term *hearing impaired*.

NCDJ says: "When quoting or paraphrasing a person who has signed their responses, it's appropriate on first reference to indicate that the responses were signed. It's acceptable to use the word 'said' in subsequent references."

Developing nations vs. third-world countries

[AP Stylebook: Third World](#)

Use *developing nations* or *developing country* instead of *third-world countries*. The term third-world country is dehumanizing and offensive. The World Health Organization uses the following data-based terms instead (abbreviations included because they are commonly used). Whenever possible, specify the exact country or countries to avoid labeling altogether.

- low- and middle-income country (LMIC) and low- and middle-income countries (LMICs)
- upper-middle-income country (UMIC) and upper-middle-income countries (UMICs)
- high-income country (HIC) and high-income countries (HICs)

Disproportionately affected vs. vulnerable groups

Avoid use of terms such as *vulnerable*, *marginalized*, and *high-risk* as adjectives. These terms are stigmatizing and vague. They also imply that the condition is inherent to the group rather than the actual causal factors.

The preferred terms are *disproportionately affected, groups that have been [economically/socially] marginalized, groups at higher risk of [outcome], groups experiencing disadvantage, groups experiencing disproportionate impact, population of focus*, or *under-resourced communities.*

Engage, prioritize vs. target, tackle

Use *engage*, *prioritize*, or *consider the needs of* instead of *tackle, target, combat*, or other terms with violent connotation when referring to people, groups, or communities.

These terms are okay to use when referring to disease, e.g., "NIH works to combat Alzheimer's disease and related dementias..."

Failed treatment

Do not use *the patient failed treatment,* which inappropriately blames the patient. Use *the treatment was not effective in the patient* or *the patient did not respond to treatment*, instead.

Food insecurity

Food insecurity, when households lack access to adequate food because of limited money or other resources, is a leading health and nutrition issue in the United States. Reference the [USDA's Definitions of Food Security](#) for ranges of food security and use recommendations. These terms may require brief explanations if the meanings aren't clear from the context.

Food insecurity is related to suboptimal and/or poor diet quality, which increases chronic disease risk among the socioeconomically disadvantaged.

HIV vs. HIV/AIDS

Use HIV instead of HIV/AIDS. AIDS evokes suffering and death and should be used only when describing AIDS specifically. HIV is inclusive of both HIV and AIDS when the reference is not specific, as in "the HIV epidemic." HIV and AIDS do not need to be spelled out on first reference.

Immigrant, refugee vs. illegal aliens, foreigners

[AP Stylebook: Immigration](#)

Use *people with undocumented status, mixed-status households, immigrant, migrant, asylum seeker, refugee,* or *non-U.S.-born people* (as appropriate and contextually) instead of stigmatizing terms such as *illegals, illegal immigrants, illegal aliens, illegal migrants, foreigners,* or *the foreign-born*.

Intimate partner violence vs. domestic violence

Use *intimate partner violence* or *gender-based violence* instead of *domestic violence.* The preferred terms are more specific and include relevant violence outside of a shared home.

Patients vs. subjects

Use *patients, participants,* or *individuals* instead of *subjects* when referring to clinical trial participants, unless *research subjects* is specific to a policy or regulation.

People experiencing homelessness vs. the homeless

[AP Stylebook: Homeless](#)

Use *people experiencing homelessness, people without housing,* or *people without homes* instead of the dehumanizing collective noun *the homeless.*

People living with HIV

Use *people living with HIV* instead of *HIV-infected people* or *people infected with HIV.* Infection carries the stigma of being contagious, a threat, or unclean. HIV advocates frequently highlight the damaging consequences of this word choice. *Living with* is an affirmation of life many advocates prefer. *People with HIV* is also acceptable.

People with lower incomes vs. poverty-stricken, the poor

Use *people with lower incomes, people/households with incomes below the federal poverty level, people experiencing poverty,* instead of *poverty-stricken, the poor,* or *poor people.* Do not use *underserved* when meaning low socioeconomic status. The term *people with lower socioeconomic status (SES)* should only be used when SES is defined (e.g., when income, education, parental education, and occupation are used as measures).

Stakeholder vs. collaborator

Avoid the term *stakeholder* when referring to working partners and community collaborators, especially when working with Tribes. Instead, use terms that describe the nature of their influence or involvement.

Stakeholder can be used to reflect a power differential between groups and has a violent connotation for some Tribes and Tribal members. It also groups all parties into one term, despite potential differences in the way they are engaged or interact with a project or activity.

Some alternative terms are *community members*, *persons affected by [policy/program/practice]* or *partners, collaborators, allies, community engagement,* or *Tribal engagement*.

Suffering from

Do not use general phrases like *suffering from (condition/disorder)*. The word suffering has social and emotional implications that are unhelpful. Use specific medical language instead.

Suicide

[AP Stylebook: Suicide](#)

Use *died by suicide* or *attempted suicide* instead of *committed suicide*. *Commit* connotes criminality or sin.

Suicide attempts should not be described as *successful*, *unsuccessful*, or *failed*. Instead, use *survived a suicide attempt,* just as one might describe an individual who has survived cancer or a heart attack.

Alcohol and Substance Use

Please also reference:

- The National Institute on Alcohol Abuse and Alcoholism's page [When It Comes to Reducing Alcohol-Related Stigma, Words Matter](#)
- The National Institute on Drug Abuse's page [Words Matter – Terms to Use and Avoid When Talking About Addiction](#)

Alcohol misuse vs. alcohol abuse

Use *alcohol misuse* instead of *alcohol abuse* when referring broadly to drinking in a manner, situation, amount, or frequency that could cause harm to the person who is engaging in drinking or to those around them.

Alcohol overdose vs. alcohol poisoning

Use *alcohol overdose* instead of *alcohol poisoning,* which is not an accurate term.

Alcohol use disorder vs. alcoholism

Use the term *alcohol use disorder* rather than *alcoholism, alcohol abuse*, or *alcohol dependence*. This aligns with the medical community and federal government's initiatives to raise awareness that compulsive substance use is a complex brain disorder rather than a moral failing or personality flaw.

Alcoholic and *abuse* are negative terms that invite a value judgment. Addiction is not a diagnostic term although it is an acceptable synonym for moderate or severe substance or alcohol use disorder.

Alcohol-associated hepatitis, alcohol-associated cirrhosis, and alcohol-associated pancreatitis

Use the terms above instead of *alcoholic hepatitis, alcoholic cirrhosis,* and *alcoholic pancreatitis*. While the substitution of *alcoholic* with *alcohol-associated* has not been adopted widely for these health conditions, changing the language may help to reduce stigma for people diagnosed with these health conditions.

Alcohol-associated liver disease

Use *alcohol-associated liver disease (ALD)* instead of *alcoholic liver disease*. Use of *alcoholic* as an adjective may perpetuate stigma for people with ALD and other alcohol-related health conditions. Alcohol-associated liver disease has been adopted officially in the field of alcohol research.

Baby with neonatal abstinence syndrome vs. born addicted

Use *baby with neonatal opioid withdrawal/neonatal abstinence syndrome* instead of *born addicted* or *addicted baby.* Babies cannot be born with addiction because addiction is a behavioral disorder—they are simply born manifesting a withdrawal syndrome. Use clinically accurate, non-stigmatizing language the same way you would for other medical conditions.

Fetal alcohol spectrum disorders

Fetal alcohol spectrum disorders, also known as *FASD*, is a term that refers to the broad range of lifelong birth defects and neurodevelopmental abnormalities that occur because of prenatal alcohol exposure.

Focus on the fetus and pregnancy, rather than the mother, as this reduces stigma. For example, use *alcohol-exposed pregnancy* vs. *mother/person who drinks during pregnancy.*

Medications to treat opioid use disorders vs. medication-assisted treatment

The widely used term *medication-assisted treatment (MAT)* stigmatizes the pharmacotherapies as less than adequate and distinct from medications for other medical conditions. Use *medications for opioid use disorder,* or *MOUD,* instead of MAT.

Person in recovery

Use *person in recovery* or *person in recovery from alcohol/substance use disorder* instead of *recovering alcoholic/addict*.

Person with a substance use disorder

AP Stylebook: Addiction

Use *person with a substance use disorder* instead of *addict, user, junkie,* or *drug abuser.*

Person with alcohol use disorder vs. alcoholic

AP Stylebook: Alcoholic

Use *person with alcohol use disorder* instead of *alcoholic*.

Person with an opioid use disorder or person with opioid addiction

Use *person with an opioid use disorder (*abbreviated to *OUD*) or *person with opioid addiction* instead of *addict, user, junkie,* or *drug abuser.* In general, use the term opioid and not narcotic.

Return to use, recurrence vs. relapsed

Use the terms *return to use* or *recurrence* instead of *relapse* when referring to someone who has returned to alcohol or drug use.

Substance use disorder, drug addiction vs. habit

Use *substance use disorder (SUD)* or *drug addiction* instead of *habit*. Habit implies that a person is *choosing* to use substances or can *choose* to stop. This implication is inaccurate. Describing SUD as a habit makes the illness seem like a choice, or less serious than it is.

A person can have multiple substance use disorders to different substances (alcohol, stimulants, opioids, etc.). Be thoughtful about when to use a plural version of this term versus the singular *disorder.*

Testing positive (on a drug screen)

Use *testing positive* when referring to a drug screen, rather than *dirty,* or *failing a drug test.* Use medically accurate terminology the same way it would be used for other medical conditions. Also do not use *clean* to describe negative test results or abstinence from drug use.

Treatment center vs. rehab

Use *treatment center* instead of *rehab* or *detox center.* The latter terms carry cultural stigmas and misconceptions.

Use, misuse vs. abuse

When referring to illicit drugs, refer to their *use* instead of *abuse*. The term *misuse* should be reserved for prescription medications used other than as prescribed.

Disabilities

AP Stylebook: Disabilities

Unless you are referring to any disability type, be specific about which disability you are referring to.

If data on disability will be reported, please contact the Office of Equity Diversity and Inclusion for the federally recognized disability categories.

Disability vs. handicap

Use *disability* instead of *handicap.*

Disability-related metaphors

Avoid using disability as a metaphor, which perpetuates negative and disempowering views of people with disabilities.

Below are some disability-related metaphors and their alternatives:
- Blind to/deaf to → willfully ignorant, deliberately ignoring
- Crazy/schizophrenic → wild, confusing, unpredictable
- Lame → boring, uninteresting, monotonous, uncool
- OCD → fastidious, meticulous, hyper-focused
- Cripples the service → slows down the service
- Sanity-check → check for completeness and clarity
- Stutter step, stuttering used as a verb to denote slowness, choppiness → sidestep, dodge, with hesitation

Needs, differences vs. deficit, defect

In general, do not use terms like *deficit, defect, abnormality, or problem* when talking about people, particularly in mental health. Instead, use *needs, differences,* or *challenges.* The term *disability* is accepted and it may help to be more specific (e.g., *intellectual disability, physical disability, language disability,* etc*.*).

It is acceptable and helpful to use terms like *abnormality* or *problem* when referring to measurable medical incidences like *abnormality of the fingers or breathing problems/difficulties.*

Nondisabled person, person without disabilities vs. normal

When comparing persons with disabilities to others, use the term *nondisabled person* or *person without disabilities* rather than *normal* person, because *normal* is associated with *abnormal*.

When referring to someone without intellectual disabilities, use *without [disorder],* or *neurotypical* instead of *normal.*

Person who uses a wheelchair vs. wheelchair bound

Use *person who uses a wheelchair* or *wheelchair user* rather than *wheelchair bound* or *confined to a wheelchair.* Assistive technologies and services should be portrayed as helping and accommodating a person rather than making them "correct" or emphasizing limitation.

Person with disabilities vs. handicapped

Use *person with disabilities* or *disabled person* instead of *handicapped, handi-capable, differently abled,* or *the disabled.* Community preference for person-first or identity-first varies.

Autism

AP Stylebook: Autism

Autism

Autism spectrum disorder (abbreviated as ASD) is a developmental disorder, sometimes called a neurodevelopment disorder, and should never be referred to as a mental illness or a disease.

Characteristics vs. symptoms

Use the terms *characteristics*, or *traits*, instead of *symptoms* when referring to people on the autism spectrum.

Cure, prevention

Avoid using the terms *cure* and *prevention* in relation to autism.

High-support needs vs. high-/low-functioning

AP Stylebook: High-functioning, low-functioning

Avoid using the terms *high- or low-functioning* when referring to a person with autism (or any condition). This language is stigmatizing, dehumanizing, and vague. Instead, describe the person's needs specifically, e.g., *high-support needs; person with intellectual disabilities; person with language disabilities.*

Neurodiversity

AP Stylebook: Neurodiversity

Neurodiversity describes the idea that people experience and interact with the world around them in many ways, with no one "right" way of thinking, learning, and behaving, and differences are not deficits. Neurodiversity refers to the diversity of all people, but it is often used in the context of autism spectrum disorder and other neurological or developmental disorders such as ADHD or dyslexia. This language can be helpful to use when talking about workplace or classroom accommodations for neurodiverse people. Referring to someone as neurodiverse or neurodivergent is a way to focus on the positive aspects of their differences and what that can bring to the group setting, rather than focusing on their disabilities.

Nonspeaking vs. nonverbal

Use *nonspeaking* instead of *nonverbal*. Many people on the autism spectrum may be nonspeaking but are able to communicate very well using technology or other means.

Person with autism, autistic person, person on the autism spectrum

The autism community is diverse and while some people prefer person-first language — *person with autism* or *person on the autism spectrum* — others have proudly claimed identity-first language and prefer *autistic person*. Generally, *person on the autism spectrum* is the least polarizing term. Informally, some NIH ICOs will switch back and forth between person-first and identity-first language around autism to be inclusive. That said, always use person-first language when referring to children with autism; identity-first language is something a person chooses for themselves.

Likelihood vs. risk

Use *increased likelihood for autism* instead of terms like *risk of autism* or *at risk for autism.* Likelihood is more specific and less stigmatizing.

Interventions, services, therapies vs. treatment

In relation to ASD specifically, use the terms *interventions, services,* and/or *therapies* (as appropriate) and avoid using *treatment.*

Obesity

Overweight

Overweight is a defined medical condition according to body mass index, commonly known as BMI. It may be used as either a noun or an adjective in person-first language. For example, both *people with overweight* and *people who are overweight* are acceptable; *overweight people* is not acceptable.

Person with obesity vs. obese

Use *person with obesity*, *person affected by obesity*, or *person who has obesity* instead of *obese person* or *they are obese.* Obesity should always be referred to as a *disease*, not as a *condition.*

Weight, excess weight vs. weight problem, fat, morbidly obese

Use *weight* or *excess weight* rather than *weight problem, fat, morbidly obese,* or similarly pejorative descriptors. Note that excess weight and similar general terms should not be used as synonyms for overweight and obesity.

Age

The following are the American Medical Associations' age designations:

Neonates or newborns (birth to 1 month)
Infants (1 month to 1 year)
Children (1 year through 12 years)
Adolescents (13 years through 17 years. They may also be referred to as teenagers depending on the context.)
Adults (18 years or older)
Older adults (65 and older)*

*The National Institute on Aging's guidance considers 65 and older an older adult, but understandings and definitions about this age range vary by source. When an official or organization uses one of these terms, ask for specifics.

Children

Avoid vague terms such as babies, school-aged children, or teenagers, without first defining them (e.g., infants ages 5 months to 1 year, children ages 6-12 years, adolescents ages 13-17 years). When possible, use a specific age or age range.

Older adults vs. the elderly

Use *older adults* or *people over age X* instead of *the aged, elders, the elderly,* or *senior citizens.* The word adult affirms agency and personhood, as does person-first language. When possible, use a specific age or age range. The only exception to this rule might be when referencing Tribes/American Indian/Alaska Natives, for which the term *elders* may be preferred and culturally appropriate.

Race and National Origin

General guidance

AP Stylebook: Race-related coverage
Avoid using *Black* and *White* as standalone nouns. Instead of *Blacks*, use *Black people*, etc.

Capitalize all references to race, including White. This is a divergence from AP style.

Avoid collective reference to racial and ethnic minority groups as non-White unless it was a formal category in a database or research document. Instead, indicate the specific groups.

Avoid using *race/ethnicity* because the slash implies that these are interchangeable terms. Instead use *race and ethnicity* or *race or ethnicity*, as appropriate.

Include context when writing about race and other people-related language. Populations should be described specifically whenever possible, and we should not default to using *minorities* or *racial and ethnic groups* when we're really talking about specific populations.

If race is pertinent to the story, ask your source for their preference on what term(s) to use.

If data on race and ethnicity will be reported, please contact the Office of Equity Diversity and Inclusion for the officially recognized Ethnicity and Race Indicator categories.

Alaska Native (Aleuts, Eskimos, Indians of Alaska), Alaskan

An Alaska Native (*not* Alaska**n** Native) is a person whose origins are in any of the original peoples of Alaska and who maintains cultural identification through Tribal affiliation or community attachment. An Alaskan is anyone who was born in Alaska or who is a long-term resident of Alaska.

American Indian or Native American

A person whose origins are in any of the original peoples of North, Central, or South America (except Alaska) and who maintains cultural identification through Tribal affiliation or community attachment. Whenever possible, specify the nation or people (e.g., Navajo, Cherokee, Inuit) rather than use the more general term.

The abbreviation AI/AN stands for American Indian / Alaska Native and is often used in reference to Tribal affairs.

Asian, Asian American

A person whose origins are in any of the original populations of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippines, Thailand, and Vietnam. Do not use the word *oriental*.

Use specific terms whenever possible. If race is pertinent to the story, ask your source for their preference on what term(s) to use. Do not hyphenate Asian American or other dual-heritage terms.

AAPI, which stands for Asian Americans and Pacific Islanders, is an acronym widely used by people within these communities but may not be familiar to readers outside of them; spell out the full term and define when used in quotations.

Biracial, multiracial, of mixed race

A person who has parents or ancestors of different racial backgrounds. Some consider using *mixed* alone to be stigmatizing, while others claim the term positively. *Mixed race* is used frequently in academia and elsewhere, though some say it has stigmatizing potential.

Black and African American

An African American is a person whose origins are in any of the Black racial groups of Africa. If appropriate, specific terms such as *Haitian* or *Nigerian* may also be used. Black is broader and more inclusive than African American – someone within your target audience could be born in Jamaica and live in the U.S. and identify as Black but not African American. Use of the capitalized Black recognizes that language has evolved and, especially in the United States, the term reflects a shared identity and culture beyond skin color.

When discussing scientific data, use the term that was used when the research (the source of the data) was being conducted. Capitalize the word Black when referring to race. Do not hyphenate African American or other dual-heritage terms.

Latino/a or Latinx

A person whose origins are in Latin America, including Cuba, Mexico, Puerto Rico, South America, or Central America. Latino is reserved for men and Latina for women. The plural Latinas is for a group of women and Latinos is for a group of men. A mixed gender group of Latin American descent, however, would revert to the masculine *Latinos*.

Latinx is a gender-neutral term. Only use Latinx if someone has said they identify that way; it is not accepted by many Latinos. Use specific language when possible.

Hispanic

A person descended from Spanish-speaking populations. People who identify their origin as Hispanic, Latino, or Spanish may be of any race. Most people with origins in Brazil are considered Latino but not Hispanic because most Brazilians speak Portuguese. Similarly, Spanish people may be considered Hispanic but not Latino. Because the terms are vague, use the more specific geographic origin (Colombian, Honduran, Brazilian), if possible.

Chicano or Chicana

Chicano refers to "Mexican Americans in the U.S. Southwest." The Diversity Style Guide points out that the terms Chicano and Chicana were originally derogatory, but they were reclaimed "in response to discrimination against Mexican Americans working under unfair labor and social conditions." Chicano/a is a chosen identity; only use it if someone self-identifies as such.

Middle East, MENA, Arab Americans

AP Stylebook: Middle East

When writing about people of Middle Eastern or North African (MENA) descent, allowing individuals to self-identify is best. State the nation of origin (e.g., Iran, Iraq, Egypt, Lebanon, Israel) when possible. In some cases, people of MENA descent who claim Arab ancestry and reside in the United States may be referred to as *Arab Americans.*

Minority health

Minority health refers to distinctive health characteristics and attributes of racial and/or ethnic minority populations who are socially disadvantaged and underserved in health care, in part due to racist or discriminatory acts. Minority health research is the scientific investigation of singular and combinations of attributes, characteristics, behaviors, biology, and societal and environmental factors that influence the health of minority racial and/or ethnic population(s), including within-group or ethnic sub-populations, with the goals of improving health and preventing disease.

Hawaiian

The Asian American Journalists Association points out that *Hawaiian* "[r]efers to a person who is of Polynesia descent. Unlike a term like Californian, Hawaiian should not be used for everyone living in Hawaii."

Similarly, The Diversity Style Guide uses the term *Native Hawaiian*, explaining: "Known as *Kanaka Maoli* in Hawaiian, Native Hawaiians trace their lineage and language to Polynesians, including Tahitians, Maoris and Samoans."

The term *Part-Hawaiian* is acceptable when appropriate because it is a legal status. However, do not capitalize *part* with other nationalities (example: *part-Japanese*).

Pacific Islander

The [Asian American Journalists Association](#) calls *Pacific Islander* a "U.S. Census term, referring to one of eight groups—Fijian, Guamanian, Hawaiian, Northern Mariana Islander, Palauan, Samoan, Tahitian and Tongan."

See also: Asian Americans and Pacific Islanders (AAPI).

Indigenous peoples, First peoples, First Nations, Aboriginal peoples, and Native peoples

These terms refer to people with origins in the original or earliest known inhabitants of an area, in contrast to groups that have settled, occupied, or colonized the area more recently in human history. These terms may be useful to describe Indigenous people in a global context.

Person of color

A person of color, commonly abbreviated POC, is someone who is not White or of European origin. Many prefer this term to *racial minorities* and consider it inclusive of all non-White races, while some individuals with non-White identities may not relate to the term. Still others consider it euphemistic or irrelevant. Do not use *people of color* when referring to one specific racial group who doesn't identify as White; use a term specific to that group.

Tribe, tribal

Always capitalize the word Tribe or Tribal, even when not referring to a specific Tribe. NIH's [Tribal Health Research Office](#) recommends NIH follow the precedent of the U.S. Department of the Interior and other federal agencies and capitalize Tribal in all instances, even when used as a common noun.

White

A person whose origins are in any of the original peoples of Europe, the Middle East, or North Africa. Avoid the term *Caucasian* because it technically refers to people from the Caucasus region. Avoid language that frames being White as a default, normal, or "raceless" identity. Non-Hispanic White is sometimes used to clarify that the described group does not include White Hispanic people.

While there is some debate over whether White should be capitalized, we follow the OMB standard and will capitalize all references to race, which is a divergence from AP style.

Sex, Gender, and Sexuality

[AP Stylebook: Gender, sex, and sexual orientation](#)

For a thorough list of terminology about sexual and gender minorities, please reference [the Office of Equity, Diversity, and Inclusion's LGBTI-SafeZone Terminology page](#).

Bisexual

Bisexual people have the potential to be emotionally, romantically, or sexually attracted to people of the same and different gender—not necessarily at the same time, in the same way, or to the same degree.

Cisgender

A cisgender person is someone whose gender identity aligns with the sex assigned to them at birth; sometimes abbreviated as *cis*. Use *cisgender* first with *cis* in parentheses after it if you use the abbreviation in your writing.

Gender

Gender refers to socially constructed roles, behaviors, activities, and/or attributes that a given society associates with being a woman, man, girl, or boy, as well as relationships with each other. As a social construct, gender varies from society to society and can change over time.

Gender affirmation, gender confirmation, transition, transitioning

Use the terms above rather than the terms *transgendering, sex change, the surgery, or pre-operative/post-operative. Gender affirmation* and *transition* define the interpersonal, interactive process where a person receives social recognition and support for their gender identity and expression. This process can but does not necessarily involve medical intervention, which can include hormone therapy and one or more surgeries to affirm one's gender. *Pre-/post-operative* may still be used in medical literature but should not be applied to a specific person without their consent.

Gender expression

Gender expression is how one chooses to convey one's gender identity through behavior, clothing, and other external characteristics.

Gender identity

An individual's sense of being a man, woman, boy, girl, genderqueer, nonbinary, etc. This identity is not necessarily visible to others.

Gender non-conforming

A person whose gender expression is not consistent with the societal or cultural norms expected of that gender.

Intersex and differences in sex development

Intersex is a general term used to refer to individuals born with, or who develop naturally in puberty, biological sex characteristics that are not typically male or female. Never use the term *hermaphrodite*. *Differences in sex development (DSD)* is an inclusive umbrella term; some people with DSD identify as intersex.

LGBTQIA+

LGBTQIA+ stands for lesbian, gay, bisexual, transgender, queer, intersex, and asexual. The plus sign includes other members of the community, such as genderfluid, nonbinary, or two-spirit, among others.

Use LGBTQIA+ when writing about the community outside of research contexts, e.g., community engagement or Pride. Use *sexual and gender minority (SGM) populations* when referring to health research and policy.

Misgender

To misgender is to refer to someone, especially a transgender or gender diverse person, using a word or address that does not correctly reflect their gender identity.

Nonbinary

A nonbinary person identifies outside of a gender binary by seeing themselves as neither a man nor or woman. Nonbinary people are part of the trans community.

Pronouns

Use pronouns that correspond to a person's gender identity. Because gender identity is an internal characteristic that should not be assumed, asking for a person's pronouns is the best practice. In addition to the binary English pronouns *she/her* and *he/his*, some people may use nonbinary pronouns, including the pronouns *they/them* used as singular terms, among others. When using the singular *they*, still conjugate the verb as a plural, as in, "they are gender nonbinary."

When writing about a hypothetical person, like an anonymous participant in a study enrolling people of all genders, use the singular *they* rather than *he* or *she*.

Please review [Gender Pronouns and Their Use in Workplace Communications](#) for a more in-depth discussion.

Queer

The term *queer* is more fluid and inclusive than traditional categories for sexual orientation and gender identity. Once considered a pejorative term, queer has been reclaimed by some LGBTQIA+ people to describe themselves; however, it is not a universally accepted term even within the LGBTQIA+ community. People who identify as queer may think of their sexual orientation and/or gender identity as characterized by nonbinary constructs of sexual orientation, gender, and/or sex. *Queer* should only be used to describe members of the community who themselves identify with it.

Sex, sexual

A biological category based on reproductive, anatomical, and genetic characteristics, generally defined as male, female, and intersex.

Sex is used when describing anatomical, chromosomal, hormonal, cellular, and basic biological phenomena. E.g., *sex development, sex hormones, sex characteristics.*

Sexual is used when referring to sexual identity, attraction, and activity, as well as related physiological, psychological, or behavioral processes. E.g., *sexual orientation, sexual minority, sexual health, sexual behavior.*

Sexual and gender minority

Sexual and gender minority (SGM) populations include, but are not limited to, individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer, and/or intersex. Individuals with same-sex or -gender attractions or behaviors and those with a difference in sex development are also included. These populations also encompass those who do not self-identify with one of these terms but whose sexual orientation, gender identity or expression, or reproductive development is characterized by non-binary constructs of sexual orientation, gender, and/or sex.

Use *sexual and gender minority (SGM)* populations as a broad, umbrella term when referring to LGBTQIA+ communities as a singular population in the context of health research, related activities, and policy. Use LGBTQIA+ when identity is important (e.g., community engagement, Pride messaging). When writing about a specific research project or study, always use the population terms identified and defined by the investigators for that study. For example, a study could be examining outcomes among sexual minority women, while another may look at LGB people. In these instances, using SGM populations or LGBTQIA+ would not be appropriate. For more information, see the [Sexual and Gender Research Minority Office's website.](#)

Sexual orientation

Use *sexual orientation* rather than *sexual preference*. Preference suggests that non-heterosexuality is a choice, a concept often used to discriminate against the LGBTQIA+ community. Preference also suggests a selection from two or more choices, excluding bisexual people and pansexual people, among others.

Transgender, trans

[AP Stylebook: Transgender Coverage Topical Guide](#)

A transgender person is someone who identifies with a gender other than the one that was assigned to them at birth. Use the term *transgender* or *trans* and not *transgendered*. Transgendered is a dated term that suggests a point in time when a person "became" transgender, which diverges from the lived experiences of most transgender people. Trans is an adjective that helps describe someone's gender identity, and it should be treated like other adjectives (e.g., *trans man, trans woman*). Merging the adjective and the noun risks suggesting that a trans man or woman is more (or less) than just a man or just a woman, which goes against how many trans people identify themselves.

Two Spirit

A person who identifies as having both a masculine and a feminine spirit and is used by some Indigenous people to describe their sexual, gender, and/or spiritual identity. Traditionally, American Indian two-spirit people were male, female, and sometimes individuals with intersex

traits who combined activities of both men and women, with traits unique to their status as two-spirit people; they occupied a distinct, alternative gender status.

Various spellings of Two Spirit exist, including uppercase, lowercase, and hyphenated or with a number (e.g. *2Spirit, Two Spirit, two-spirit*). *2S* is the most common abbreviation. Consensus on spelling isn't set, but *Two Spirit* is most frequently used.

Inclusive and Gender-Neutral Language

AP Stylebook: Gender-neutral language

All genders vs. both genders

Because there are many different gender expressions, avoid using binary language that assumes there are only two. Use *all genders* instead of *both genders*, *opposite sex,* or *either sex.* If referring to biological sex alone, use *female*, *male*, or *intersex*.

Breastfeeding, chestfeeding

The term *chestfeeding* or *bodyfeeding* can be used alongside breastfeeding to be more inclusive. Nonbinary or trans people may not align with the term breastfeeding because of their gender or may have a dysphoric relationship to their anatomy. Chestfeeding will not replace the word breastfeeding, but it should be included as an option when discussing lactation.

Breastfeed (v.) is one word, as is breastfed (adj.).

Chair, chairperson vs. chairman, chairwoman

AP Stylebook: Chair

Use *chair* instead of *chairman* or *chairwoman*. This is a divergence from the HHS Style Guide.

Everyone vs. ladies and gentlemen or men and women

Avoid unnecessarily gendered language. There are ways to be gender-neutral and inclusive. You could use *everyone* or *all* instead of *men and women* and *distinguished guests* or *folks* instead of *ladies and gentlemen.*

Parent, parenting, caregiving vs. mothering

Avoid language that assumes the mother is the primary parent or caregiver. Use *parenting* instead of *mothering* unless referring specifically to a mother-child relationship. You can also use *caregiving* to be inclusive of non-parents in caregiving roles.

Many practices recommended in pregnancy to women/pregnant people can also be directed to fathers/non-pregnant partners. Too often, the burden of prenatal care and establishing healthy habits are directed only at the pregnant person, when a partner can also play an important role.

Police officer vs. policeman

Use *police officer* instead of *policeman*. This same rule applies generally: *postal worker, firefighter*, etc.

Pregnant women, pregnant people

Both *pregnant women* and *pregnant people* are acceptable phrases. It is unnecessary to avoid the word *women* by substituting phrases like *birthing people,* or *people with uteruses*. Neutral terms like *pregnant patients, pregnant people,* or other wording as applicable (e.g., *pregnant teens),* present an inclusive alternative. Use judgement and context to determine whether to use *pregnant women* or *pregnant people / pregnant patients.*

Using more limited and specific language is sometimes important. For instance, if discussing a study that only involves cisgender women, gender-specific language (pregnant women) would be most accurate to reference that study's findings. If the word *women* is preferable, but transgender and nonbinary people are also referenced, phrasing like *women and other pregnant patients* can provide an inclusive alternative.

Spokesperson vs. spokesman

Use *spokesperson* instead of *spokesman*. This guidance diverges from the HHS Style Guide.

Grammar and Punctuation

Action verbs

Action verbs are short and direct. Avoid using the noun form when using the verb is simpler and clearer. Use *does* verbs instead of *is* verbs. Example: *He runs* instead of *He is running*.

Incorrect: give consideration to / is applicable to

Correct: consider / applies

Active voice

Use active voice whenever possible and appropriate. In the active voice, the subject of the sentence acts. In the passive voice, the subject of the sentence is acted upon. Verbs in the active voice are stronger, enhance clarity, and make a sentence easier to read. Passive voice is appropriate when the actor is unknown, unimportant, or obvious, e.g., small items are often stolen.

Passive: The decision has been changed.

Active: NIH changed the decision.

Apostrophe

Apostrophes are used in contractions and with possessive nouns, but never to denote plural.

In contractions, the apostrophe stands for omitted letters or numbers.

Examples: We're working on a cure.

The disease first appeared in the '80s.

The possessive case denotes ownership or possession, and the apostrophe replaces the word *of* (*children's health* stands for *the health of children*).

Examples: the vaccine's availability (singular noun)
the virus' potency (singular noun ending with an *s*)
the agencies' policies (plural noun ending with an *s*)
women's health issues (plural noun not ending with an *s*)
the meeting informed Congress' decision (proper noun ending with an *s*)

Never use *'s* to form the plural of an abbreviation or number.
Incorrect: We will issue many RFP's this year.
Correct: We will issue many RFPs this year.

Incorrect: The disease was eradicated in the 1970's.
Correct: The disease was eradicated in the 1970s.

Avoid unnecessary words

Below are some frequently used unnecessary words and phrases and their alternatives.

Instead of:	*Use:*
Utilize	use
Due to the fact that	because
In the event that	if
Prior to	before
As a result of	because
For the purposes of	to
In order to	to
Reason why	reason
Whether or not	whether
At the present time	now, currently

Eliminate most intensifying modifiers, such as *very*.

Comma, serial comma

AP Stylebook: Comma

AP style omits the *serial comma* (the comma before the "and" in a list), so do not include the serial comma for press releases. For other NIH web writing or publications, the serial comma is acceptable and can be clarifying.
Example: "ACTIV has launched hundreds of research studies on diagnosis, prevention, and treatment strategies."

Continuous, continual

Continuous occurs without interruption, while *continual* occurs at regular intervals.

Dash

AP Stylebook: Dashes

- Em dash

- o Em dashes (—) can be used in pairs to mark off additional information that is not essential to understand the sentence. Here they function similarly to parentheses or a pair of commas. An em dash is usually written without spaces on either side, but AP style calls for a space on both sides. With or without spaces is acceptable for NIH web writing.
    - ▪ *Example:* Dark leafy greens — such as spinach, kale, and chard — are an important part of a healthy diet.
- En dash
  - o Use an en dash (–) without spaces on either side to show ranges in numbers and dates. AP does not use en dashes, but they are acceptable for NIH web writing.
    - ▪ *Example:* The bubonic plague pandemic lasted from 1346–1353.

Ellipsis

AP Stylebook: Ellipsis

Geographic terms

AP Stylebook: Geographic Names

Hyphen

AP Stylebook: Hyphen

Use a hyphen between two words that form a compound modifier when that modifier immediately precedes the noun it modifies. When a compound follows the noun it modifies, hyphenation is usually unnecessary. Compare:

- Applications undergo a rigorous two-stage review.
- The applications are reviewed in two stages.

Do not use a hyphen in a compound modifier formed by an adverb ending in *ly* plus an adjective (such as *federally funded*). This is true whether the compound modifier precedes or follows the noun it modifies.

Parallel construction

Parallel structure means using the same pattern of words to show that two or more ideas have the same level of importance. This can happen at the word, phrase, or clause level. The usual way to join parallel structures is with the use of coordinating conjunctions such as *and* or *or*. This is especially important when writing lists.

With the **-*ing*** form (gerund):
  Correct: This program's funding goes toward predict**ing**, prevent**ing**, diagnos**ing**, and treat**ing** blood disorders.

Do not mix forms, for example:
  Incorrect: …funding goes toward predict**ing**, prevent**ing**, **diagnosis**, and **to treat** blood disorders.

Changing to another pattern within a clause or changing the voice of the verb (from active to passive or vice versa) will break the parallelism. Example of parallelism with clauses:

Parallel: In our classroom, students are expected to be **kind**, **respectful**, and **prompt**.

Not parallel: In our classroom, students are expected to be **kind**, **respectful**, and **arrive promptly.**

Period
[AP Stylebook: Period](#)
Use a single space after a period at the end of a sentence.

Quotation mark
[AP Stylebook: Quotation Marks](#)
Always place quotation marks outside periods and commas. Placement of quotation marks with question marks and exclamation points depends on whether the question or emphasis is part of the quotation.

> *Examples:* The lecturer asked, "Are there any questions?"
> What do you mean, "almost accurate"?

Put quotation marks around a word or words used in irony.

> *Example:* The "debate" turned into a free-for-all.

Semicolon
[AP Stylebook: Semicolon](#)

State abbreviations
[AP Stylebook: States](#)
Spell out the state names in the body of the story.

Subject-verb agreement
Deciding whether a verb should be singular or plural is difficult sometimes.
Some guidance:

The number of, the total number of: the verb is singular.
> *Examples: The number of* samples *was* unknown.
> *The total number of* cases *was* hard to predict.

A number of, a total of: the verb is plural.
> *Examples***:** *A number of* patients *were* examined.
> *A total of* 50 vials *were* sent to the laboratory.

*As well as, in addition to, along with***:** the verb agrees with the main subject only.
> *Example: Rubella*, as well as chickenpox, *is* contagious.

Or, neither . . . nor, either . . . or: the verb agrees with the subject closest to the verb.
> *Examples:* The physicians or the *nurse has* to be present.
> The physician or the *nurses have* to be present.

Neither the medication nor the *hospital stays were* helpful.
Neither the hospital stays nor the *medication was* helpful.

None, other quantities: the agreement of the verb is context dependent.
None: None of the *medication was* taken.
None of the *symptoms were* present.

Quantities: Half of the *pill was* enough.
Half of the *patients were* sent home.

Note**:** The word data is plural and takes a plural verb form.

Toward

Not *towards*.

Unfamiliar terms

Writers can use quotation marks or italics to introduce an unfamiliar term on first use. Do not put subsequent references in quotation marks or italics. Either is acceptable as long as use is consistent within the same document or webpage.
Example: Energy is measured in "joules."
Example: Energy is measured in *joules.*

Write short paragraphs

Short paragraphs are easier to read than long paragraphs. The white space after a paragraph gives readers a moment to absorb the material they just read before moving to the next paragraph.

Write shorter sentences whenever possible

Use short sentences to make your point clear on the first reading. People digest short sentences more easily than long sentences.

Numerals

AP Stylebook: Numerals

In general, spell out one through nine. Use figures for 10 or above and whenever preceding a unit of measure or referring to ages of people, animals, events, or things.

Decimals

AP Stylebook: Decimals

If a unit of measure follows the numeral, use the decimal format, not fractions.
1.75 mg (NOT *1 3⁄4 mg*)   2.5 kg (NOT *2 1⁄2 kg*)

If the value is less than 1, insert a zero before the decimal point.
0.2 g (NOT *.2 g*)   0.9 mg/kg

Fractions

Spell out common fractions. Insert a hyphen only if the fraction modifies a noun.

> *Examples:* Patients had adverse reactions to the medication in one third of the cases.
> A two-thirds majority is needed.

Ordinals

Ordinals generally express ranking rather than quantity, so spell out *first* through *ninth*, and use the numeral for *10th* and above. Do not use superscript for ordinals.

> *Examples:* The fourth patient was admitted in critical condition.
> The 12th patient died shortly after his arrival.

When you have a mixture of ordinals below and above nine, use numerals. This is a divergence from AP style.

> *Example:* The 5th and the 12th patients showed similar symptoms.

Percentages

Singular and plural

When the quantity is less than 1, the unit of measure is singular.

> *Examples:* 0.5 gram (NOT *grams*) 0.2 second (NOT *seconds*)

Spacing

Insert a space between the numeral and the symbol, except for %, °C, °F, ° (for angles), money symbols, fractions, and inches/feet symbols.

25 g	40 mL	60 kg
30%	28.5°C	4″
£250	CHF 50*	5 ½ years

*a space is added because CHF is the abbreviation for the Swiss Franc currency and not a symbol.

Units of measure

Abbreviated units of measure do not have a period, unless they close a sentence.

> *Examples:* 50 mg (NOT *50 mg.*) 2 dL (NOT *2 dL.*)

Structure and Formatting

Alt text

Alt text, or alternative text, is a short, written description of an image. Well-written alt text is important for accessibility and search engine optimization.

Your alt text should be descriptive enough that a person who is blind or has low vision has the same information that a sighted user would get from glancing at the picture. While there is

technically no character limit for alt text, it is best to keep it short and sweet. The screen reader will pause after 150 characters and the user can press the down arrow key to continue reading.

If your photo has a caption that fully describes the picture, then alt text is not required because it would be redundant. However, there may be parts of the image that are obvious to sighted users (not needed in the caption) but need to be described in the alt text for people with visual disabilities.

Some guidelines for describing people in alt text:
- Context will determine whether to mention race, ethnicity, gender, or age.
    - If the goal of your website is to encourage older patients to ask for help accessing their online health records, then age is relevant in a photo of a doctor helping an older patient access health records via an iPad.
    - Is it relevant that the doctor is African American? Or that she is a woman? Given the context, this may not be the most important information in this photo.
- If you're using stock images, you can use the gender, race, or age keywords given by the photographer.
- If you're using images of people you know, ask them their preferred pronouns and other ways they self-identify.
- Otherwise, you can write around it by using job titles (*doctor/patient, professor/student).*

For more guidance on writing effective alt text, reference [Tips for Writing Meaningful Alt Text - Level Access](#).

Headings

Headings help users and search engines to read and understand text. They act as signposts for readers and make it easier for them to figure out what a post or page is about.

Divide your content into sections and give each section a heading to help readers understand where they are in the document. It is good practice to make sure that your headings are informative to the reader; include a primary keyword or key phrase from the content of that section in your heading. Headings should generally be limited to 70–80 characters. Headings are in title case and should never be in all caps.

- No end punctuation: Other than question marks, do not use other end punctuation (such as periods) in headings.
- No ampersands in headings: Use ampersands (&) instead of *and* only when it is part of a company's name or in a [composition title](#).
- No abbreviations or acronyms in headings: Screen readers rely on headings, so they should be written to sound natural. Avoid acronyms in headings as fully capitalized words may be read letter-by-letter by screen readers.
- Exceptions are abbreviations that are so well-known the full spelling would be awkward and unnecessary, like *HIV*.

Links

Hyperlinks provide users with additional information about a topic and can be used throughout your content. Links can be headlines, titles, statements, questions, or phrases. Make sure the linked text is clear, concise, and lets your reader know where you are sending them. Don't bold your hyperlink or use any color other than the standard blue for URLs.

Use simple descriptive text for a hyperlink instead of the URL.
> Exception: If referring to a particular website that is short and recognizable, you may use the website name as the link, but drop anything before the name of the site (http://www...) as in: Vaccines.gov

Avoid using *click here* or *go to this page* and instead hyperlink keywords that describe the information included on the page that readers will be directed to visit. When choosing which text to hyperlink, find a balance between substance and brevity.

When hyperlinking text that is followed by an acronym, include the acronym in the hyperlink. If linking to a file instead of a webpage, include the format of the linked item in parentheses as a part of the linked text. If linking to a video, include "Video" in parentheses as a part of the linked text. For example, [Presentation Slides (PDF)](#) or [NIH Peer Review Briefing for Basic Research Applicants and Reviewers (Video)](#).

Link shorteners: NIH now has our own link shortening service available for NIH staff on the NIH network or on VPN. Use the NIH link shortener here: https://go-admin.nih.gov/

Lists

[AP Stylebook: Lists](#)
Lists make it easy to quickly comprehend complex information, help readers identify steps, save words and space on each page, and can make your logic and structure clearer.

Numbered lists should be used when the items have an implied sequence (first this, then this). Bulleted lists should be used when items don't require a particular order.

Keep lists short. A full page of list items can be an indication that the content should be broken into additional sections or lists.

DO:
- Use periods at the end of items in lists when the item is a complete sentence (like in this case).
- Use parallel sentence structure when writing list items.
- Capitalize the first word following the bullet.

DO NOT:
- Add punctuation when the list items are fragments (this is a divergence from AP style).
- Connect list items into a sentence with commas or semicolons. Bullets replace other sentence punctuation in lists.

- Mix fragments and sentences in the same list.

QR codes

QR codes, or Quick Response codes, are two-dimensional codes on printed materials that are scanned with a smartphone, connecting individuals to additional online content or information. Keep in mind that QR codes should lead to mobile-friendly content. For QR code uses and resources, reference Digital.gov's QR Codes Page.

Tables

Tables help convey complex information to users.

To create useful, effective tables:
- Use tables when comparing numbers.
- Use tables when presenting a series of "if, then" sentences.
- Keep tables simple. Try to limit data tables to four columns, six rows, and 500 words.
- Use short descriptive headings.

When building tables for a website:
- Create the tables within your content management system (e.g., Drupal) — do not copy and paste from Word or another program.
- Always assign a header row or column for compliance with Section 508 of the Rehabilitation Act of 1973. Screen readers rely on reading headers.
- See the Section508.gov guidance for building accessible tables.

Title casing

In title case, the first letter of each primary word is capitalized, including the *to be* verbs (be, am, is, etc.). Articles, conjunctions, and prepositions with three or fewer letters are not capitalized. Use title case on all headings. Capitalize the second word in a hyphenated term in titles and headings, e.g., "Addressing HIV-Related Stigma." Subheadings may be in sentence case.

This Is an Example of Title Case

Appendix: Biomedical Definitions

Association, causation

An association is a relationship, or correlation. A positive association means as one goes up, so does the other. A negative association means as one goes up, the other goes down.

Causation is when an event or variable is shown to cause a specific outcome. Whether a study shows association or causation depends on the study design.

Biomarkers

Biomarkers, or *biological markers*, are biological substances, characteristics, or images that provide an indication of the biological state of an organism. Biomarkers can include

physiological indicators (e.g., blood pressure), molecular markers, (e.g., liver enzymes, prostate-specific antigen), and imaging biomarkers (e.g., those derived from magnetic resonance imaging and angiography).

An NIH working group defined a biomarker as "a characteristic that is objectively measured and evaluated as an indicator of normal biological processes, pathogenic processes, or pharmacological responses to therapeutic intervention."

Biopsy

Biopsy is the procedure of removing and examining tissue, cells, or fluids from the body. Do not use it as a verb. Observations are made on the biopsy specimen, not on the biopsy itself.

Cohort

A cohort describes a group of people who have a statistical factor (such as age, class, or medical condition) in common in a demographic study. A cohort does not refer to one individual. A cohort study is a longitudinal study that follows research participants with common characteristics over time.

Cohort is not plain language. When writing for the public, define the term first or consider referring to the cohort through alternative means, e.g., *Researchers found that Asian American women aged 30-50 have…*

Communicable vs. noncommunicable

Communicable diseases can be spread. They are also referred to as *transmissible*.

Noncommunicable diseases are not transmitted through contact with an infected or afflicted person. They are, instead, caused by various genetic, physiological, environmental, and behavioral factors. The World Health Organization identifies four main types of noncommunicable diseases: cancer, cardiovascular diseases (e.g., heart attacks), chronic respiratory diseases (e.g., asthma), and diabetes.

Comorbidity

Comorbidity is the co-occurrence of more than one disorder, disease, or condition in the same individual. The article Defining Comorbidity: Implications for Understanding Health and Health Services explains that the term and its related constructs, such as multimorbidity, morbidity burden, and patient complexity, need more precise definitions.

Complementary or alternative medicine

Complementary and alternative approaches are those with origins outside of mainstream or Western medicine. A nonmainstream health practice used together with conventional medicine is *complementary*. A nonmainstream health practice used instead of conventional medicine is *alternative*.

Don't use *alternative* if the substitution is something conventional doctors would approve of (for example, if a patient is no longer taking ibuprofen for back pain now that he's practicing yoga

regularly). When an approach is used for wellness, it's okay to use *complementary* even though the person may not be receiving conventional care (because none is needed).

Complementary and alternative approaches include products, such as herbs or dietary supplements, as well as hands-on-practices (e.g., acupuncture or spinal manipulation), other psychological or physical approaches (e.g., meditation, hypnosis, yoga), and even entire systems of care (such as Ayurvedic medicine or naturopathy). Other acceptable terms for *approaches* include *health, medicine,* and *practices.* Avoid using the term *medicine* when referring just to products. See also integrative health.

Comprise, compose

The whole comprises the parts and the parts compose the whole. *Comprise* means *contain, consist of*, or *made up of.* For example, the *FMR1* gene *comprises* 18 exons interspersed over ~40,000 base pairs of sequence, or, NIH comprises 27 Institutes and Centers.

Compose means "to be or constitute a part or element of the whole." For example, 18 exons interspersed over ~40,000 base pairs of sequence compose the *FMR1* gene.

Comprise and compose have similar meanings, but don't write *comprised of*. Use *composed of* or *constitute* instead.

Condition

Condition indicates a state of health, whether well or ill. A condition conferring illness might further be classified as a disease or disorder, however, *condition* might be used in place of *disease* or *disorder* when a non-disease-specific term is indicated.
> *For example:* Urinary retention is a *condition* in which you are unable to empty all the urine from your bladder. Urinary retention is not a disease, but a condition that may be related to other health problems, such as prostate problems in men or a prolapsed bladder in women.

Congenital vs. heritable

Congenital and heritable are often confused. *Congenital* describes conditions or traits that are acquired, either at birth or during development in the uterus. Most often, congenital indicates that some factor, such as a drug, chemical, infection, or injury has upset the careful timing and balance of the developmental process in a way that adversely affects the fetus.
> *For example:* A baby born with spina bifida most likely cannot pass this congenital condition on to future generations.

Heritable characteristics or conditions are intrinsic to the genetic makeup of an individual and are capable of being passed from one generation to the next.
> *For example:* A baby born with a heritable disease, such as hemophilia, can pass the disease on to future generations.

Contagious vs. infectious

Contagious refers to a disease that can be transmitted from one living being to another through direct contact (as with measles) or indirect contact (as with cholera). The agent responsible for

the contagious character of a disease is described as *infectious*, the usual culprits being microorganisms, such as viruses and bacteria, or macroorganisms, such as fungi or parasitic worms.

COVID-19 is both contagious (easily passing from person to person) and infectious (the infectious agent is the SARS-CoV-2 virus).

Contraception, contraceptive

Contraception is the practice of preventing pregnancy. *Contraceptive* is the method used for contraception.

Contract, develop

Patients do not develop infectious diseases; they contract infectious diseases. Noncommunicable diseases, however, develop in patients – like Alzheimer's disease or diabetes.

Critical

Patients are not critical, but their status or condition is.

Diagnose

Conditions, diseases, and disorders are diagnosed, not patients. *Diagnosis* is process of identifying a disease, condition, or injury from its signs and symptoms. A health history, physical exam, and tests, such as blood tests, imaging tests, and biopsies, may be used to help make a diagnosis.

Die of, die from, die with

People die *of*, not *from*, a condition or disease. People can also die *with* a disease that is not the immediate cause of death.

Disease

Disease is often used in a general sense when referring to conditions that affect a physical system (e.g., cardiovascular disease) or a part of the body (e.g., diseases of the eye). The term also may be used in specific senses, such as Alzheimer's disease.

Disorder

A *disorder* is a disturbance of normal functioning of the mind or body. Disorders may be caused by genetic factors, disease, or trauma. For example, a disorder resulting from cardiovascular disease is an arrhythmia or irregular heartbeat. An arrhythmia is not a disease itself; it's an abnormal heartbeat that occurs because of cardiovascular disease. In mental health, the terms *mental disorder, mental illness,* and *psychiatric disorder* are used interchangeably.

DNA or genome sequencing

Specify DNA (or genome) sequencing and DNA (or genome) sequence; do not simply write *sequencing* or *sequence.*

When referring to sequencing, use *genome sequencing* or *genome sequencing data*, not *genomic*. See also: Genome

Dose vs. dosage

Dose is amount taken at one time. *Dosage* is the amount to be taken over a period of time.

Endemic, epidemic, pandemic

AP Stylebook: Endemic, epidemic, pandemic

Endemic describes a disease (or characteristic) that is restricted to a particular region, such as cholera and plague in parts of Asia. A disease is endemic in an area; the area is not endemic. Sometimes, *endemic* is used to described when a disease is still among us but relatively under control, like influenza, e.g., "Although we may be out of the urgent pandemic phase, we're not quite ready to call COVID-19 endemic…"

Epidemic refers to a disease that involves many more people than usual in a particular community or a disease that spreads into regions in which it does not normally occur.

Pandemic is the outbreak of a disease occurring over a wide geographic area and affecting a large number of people.

Gene and protein names

Gene names should be italicized, whereas related proteins should not be italicized (e.g., *RAS* gene and RAS protein). Human and other primate gene and protein names are given in capital letters; mouse and rat genes and proteins are presented with an initial capital (e.g., human *BRCA1* gene but mouse *Brca1* gene). Refer to Chicago Manual of Style 8.132: Genes. Also reference the Guidelines for Human Gene Nomenclature based on the HUGO Gene Nomenclature Committee.

Genetics and genomics

Genetics is a term that refers to the study of genes and their roles in inheritance—the way that certain traits or conditions are passed down from one generation to another. Genetics involves scientific studies of genes and their effects.

Genomics is the study of all a person's genes (the genome), including interactions of those genes with each other and with the person's environment.

The main difference between genomics and genetics is that genetics scrutinizes the functioning and composition of the single gene, and genomics addresses all genes and their inter-relationships to identify their combined influence on the growth and development of the organism.

Genome

A *genome* is the complete set of DNA (genetic material) in an organism. In people, almost every cell in the body contains a complete copy of the genome. A genome contains all the information needed for an individual to develop and function.

Genus and species names

Spell out and italicize genus and species names at first use and use an initial capital for the genus name (e.g., *Escherichia coli* or *Homo sapiens*). Abbreviate the genus or species name using the first letter and a period with subsequent uses (e.g., *E. coli, H. sapiens*). Refer to [Chicago Manual of Style 8.120: Genus and specific epithet](#). Species should ideally be identified by full common name at first mention. For example, fruit fly (*Drosophila melanogaster*), rhesus monkey (*Macaca mulatta*).

Germ, microbe, microorganism, pathogen

Germ and *microbe* are nontechnical terms describing a living organism, especially one invisible to the naked eye, that can cause disease. Generally, use a specific term — *virus, bacteria*, or *parasite* — instead of *germ*. If writing for a publication aimed at people with lower reading levels, the term germ is acceptable.

A *pathogen* is an agent that causes diseases, especially a bacterium, fungus, or other microorganism.

Microorganism is a general term that describes all one-celled microscopic organisms, both disease-causing and benign.

Incidence, prevalence

Incidence refers to the rate of occurrence of a disease or condition during a certain time period. *Prevalence* is the total number of cases in the population at a specific time.

Incurable

An *incurable* disease, disorder, or condition is one that does not currently have a cure. *Incurable* is not synonymous with *terminal* or *fatal.* While many incurable diseases are terminal, there are also many incurable conditions that a person can live with all their life. Medical conditions such as diabetes or asthma cannot be cured, but they can be managed.

Influenza, avian flu, swine flu, seasonal flu, pandemic flu

See the [Web Style Guide | HHS.gov](#) for explanations.

Integrative health

Use *integrative* when writing about incorporating complementary approaches into mainstream health care. Note: use *integrative*, not *integrated*.

Integrative medicine refers to health services, a philosophy that emphasizes treating the whole person, rather than one organ system or specialty, and an interest in well-coordinated care between different providers and institutions. The integrative approach seeks to address aspects of illness and health beyond the biological, such as mental, emotional, functional, spiritual, social, and community aspects as well.

See also complementary or alternative medicine.

Maternal morbidity

Maternal morbidity describes any short- or long-term health problems that result from being pregnant and giving birth. Use the term *maternal health* as a more positive term for general purposes and limit *maternal morbidity* for specific problems.

Maternal mortality

Maternal mortality refers to the death resulting from complications of pregnancy or childbirth that occur during the pregnancy or within six weeks after birth.

For more associated terms, please see the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development's page on Maternal Morbidity and Mortality.

Morbidity

Morbidity means both "the relative incidence of disease" and "the condition of being diseased." Change morbidity to *illness, disease*, or *condition* when writing for lay audiences.

Mortality, mortality rate, fatality

Mortality means "the number of deaths per standard unit of population per unit of time." Change mortality to *death* for lay audiences.
Mortality rate means "the number of deaths per number of persons at risk," as in infant mortality rate (the ratio of numbers of infant deaths during a calendar year to the total number of live births during that year). Distinguish mortality from fatality.
Fatality is a death resulting from a disaster.

Nonpharmacologic

The adjectives *nonpharmacologic* and *nonpharmacological* refer to therapy that does not involve drugs, e.g., nonpharmacologic management of pain. It is written without a hyphen.

Nonpharmacologic and *nonpharmacological* are interchangeable. Similar to *economic* and *economical*, or *neurologic* and *neurological*, they may have slightly different colloquial use but functionally the same meaning. At NIH, we use *nonpharmacologic* more often and should use it instead of *nonpharmacological* for consistency.

Precision medicine

Historically, most medical treatments are designed for the "average patient" as a one-size-fits-all-approach. *Precision medicine* is an approach that considers individual differences in patients' genes, environments, and lifestyles. Precision medicine is sometimes referred to as *personalized medicine.* NIH writing should use *precision medicine* rather than *personalized medicine*.

Rare disease

The Orphan Drug Act defines a *rare disease* as a disease or condition that affects fewer than 200,000 people in the United States. Only use this terminology when prevalence and/or incidence data are consistent with this criteria.

See the National Center for Advancing Translational Sciences' [Genetic and Rare Diseases Center website](#) for more information.

Research subjects, control subjects, study participants

Research subjects have the particular characteristic, engage in the particular behavior, or are exposed to the particular variable (e.g., a certain drug) under study. Research subjects are recruited, selected, and observed.

Use *patients, participants,* or *individuals* instead of *subjects* when referring to human clinical trial participants, unless *research subjects* is specific to a policy or regulation. See: patients vs. subjects.

Control subjects are as similar as possible to research subjects except that they do not have the particular characteristic under study. Control subjects are recruited, selected, sometimes exposed to a placebo, and observed.

Study participants can be either research or control subjects.

Syndrome

A *syndrome* is a recognizable set of symptoms and physical findings that indicate a specific condition for which a direct cause is not necessarily understood. Once medical science identifies a causative agent or process with a high degree of certainty, physicians may then refer to the process as a *disease*, not a *syndrome*.

T cell, B cell

Only hyphenate as an adjective: e.g., *T-cell* therapy, *B-cell* leukemia.

Toxic, toxicity, toxin, toxicant

Toxic means "pertaining to or caused by a poison or toxin."
Toxicity means "the quality, state, or degree of being poisonous."
Toxins are natural poisons (e.g., snake venom).
Toxicants are manufactured poisons (e.g., chemical pesticides).

Vaccinate, inoculate, immunize

Of these three words, *vaccinate* has the narrowest definition: to give a *vaccine* to someone. *Inoculate* is more general and can mean to implant a virus, as is done in *vaccines*, or even to implant a toxic or harmful microorganism into something as part of scientific research. *Immunize* is the most general of the three words and can mean to grant immunity to a wide variety of things; it is sometimes used in legal language when referring to protection from unwanted legal action.

Variant, Variation, Mutant, Mutation,

Variant is the preferred term for any permanent DNA change. Variants in genes can cause disease, affect fetal development, or result in differences in how people's bodies look or work, but they may not cause disease or have any effect at all. Exposure to some types of radiation,

chemicals, or viral infections can produce variants, or they can be generated during cell division or DNA replication. Variants in egg or sperm cells can be passed on to offspring, while those in body cells aren't passed on.

Variation describes DNA sequence differences among individuals or populations.

Mutation has often been used to describe a disease-causing variant, if the change in the DNA sequence that's described causes disease or if it's induced during research (if the change is naturally occurring, use *variant*). While the term *mutation* is widely used and generally acceptable, it is not the preferred term for NIH writing.

Do not use *mutant.* Saying a gene is mutated or a research organism with a genetic change is a mutant can imply that a person with a similar genetic change is a mutant person.