

Topic Page: [Drugs](#)

Definition: **drug** from *Philip's Encyclopedia*

In medicine, any substance used to diagnose, prevent or treat disease or aid recovery from injury. Although many drugs are still obtained from natural sources, scientists are continually developing synthetic drugs which work on target cells or microorganisms. Such drugs include antibiotics. Some drugs interfere in physiological processes, such as anti-coagulants which render the blood less prone to clotting. Drugs also may be given to make good some deficiency, such as hormone preparations which compensate for an underactive gland.



Image from: [A Colombian antidrug policeman gives instructions... in Iberia and the Americas: Culture, Politics, and History](#)

Summary Article: **Drugs**

from *Encyclopedia of Environment and Society*

DRUGS ARE CHEMICALS that have a dramatic effect upon a living organism by altering one or more body organs. They can be used to alter or block the processes of diseases. They can also be misused or abused. Drugs are commonly placed into a dozen categories. Those used to treat humans are classified according to the way they affect the human body. They can also be classified by their chemical makeup, the disease they fight, the affect they have on the heart or blood vessels, or their affect on the nervous system. Manufactured drugs have three names: a scientific chemical name, a manufacturer approved generic name, and the brand name of its manufacturer.

Since ancient times, drugs have been produced from many different plants, animals, and minerals. Penicillin, an antibiotic, is probably the most famous of the infection fighting drugs. Others antibiotics include the sulfa drugs (sulfonamides).

Vaccines, antiserums, and immunoglobulins are infectious disease-preventing drugs. These drugs work by stimulating the body to create antibodies to fight potential diseases such as measles, smallpox, and polio. When the antibodies combine with the antigens on the bacteria or virus, they render them harmless. Antiserums and immunoglobulins also neutralize the antigens of the infectious disease, such as diphtheria, tetanus, hepatitis, or rabies. The cardiovascular drugs affect the heart or blood vessels by normalizing irregular heartbeats, stimulating the heart beat so that more blood is pumped, and enlarge small blood vessels; or, in the case of hypertensive drugs, treat high blood pressure. Drugs such as analgesics, anesthetics, hallucinogens, stimulants, and depressants affect the nervous system. The analgesic drugs relieve pain, but because some of them contain a narcotic, they are subject to abuse. Narcotics (analgesia plus a sedative) include codeine, heroin, and morphine. Aspirin is a nonnarcotic analgesic.

The general anesthetics are drugs that produce a state of sedation that blocks sensations. Ether halothane and thiopental have been used in surgery. Hallucinogens or psychedelic drugs such as LSD (lysergic acid diethylimide), marijuana, and mescaline produce hallucinations. Hallucinogenic mushrooms and other plants are often grown illegally, and are known to cause drug addiction. The stimulant drugs affect the nervous system. They can reduce fatigue, stimulate the kidneys, or produce other affects. Caffeine, cocaine, and amphetamines are drugs in this category, which are also subject to abuse. Depressants cause the nervous system to become relaxed so that tension and worry are diminished.

Tranquilizers (anti-anxiety agents), alcohol, and sedative-hypnotics are depressants. Other depressants include benzodiazepines and barbiturates (Phenobarbital, pentobarbital and secobarbital). Nonbarbiturate sedatives include chloral hydrate and paraldehyde. Recreational drug abuse with these is widespread. Other drugs include diuretics, hormone therapy drugs, vitamins, and immunosuppressive drugs. Drugs used in chemotherapy are the antitumor (antineoplastic) drugs.

Drug abuse has two major forms: recreational and medicinal. The recreational abuse of drugs has created criminal empires. In areas such as Burma or Afghanistan, where opium is produced; South America, where coca leaf is used for the manufacturing of cocaine; and other areas where other drugs producing crops are grown, have been subjected to efforts at eradication including the use of defoliants. The impact on the natural environment has been negative. Steroids have been abused to enhance sports performances. The medicinal abuse of drugs is probably even more widespread than the recreational use. Failure to handle medicines properly has contributed to drug resistance to bacteria strains. It has led to a race to continually produce new drugs against "stronger bugs." Some may consider another form of medicinal drug abuse to be the stimulation of animal growth for increasing meat production, often with negative side effects.

SEE ALSO:

Antibiotics; Bovine Growth Hormone; Quinine; Vaccination.

BIBLIOGRAPHY

- H. Winter Griffith; Stephen Moore; Kevin Boesen, Complete Guide to Prescription and Nonprescription Drugs 2006 (Perigee, 2005).
- Klaus Kummerer, Pharmaceuticals in the Environment (Springer-Verlag, 2004).
- Abigail A. Salyers; Dixie D. Whitt, Revenge of the Microbes: How Bacterial Resistance Is Undermining the Antibiotic Miracle (ASM Press, 2005).

Andrew J. Waskey
Dalton State College

APA

Chicago

Harvard

MLA

Waskey, A. J. (2007). Drugs. In P. Robbins, *Encyclopedia of environment and society*. Thousand Oaks, CA: Sage Publications. Retrieved from <https://search.credoreference.com/content/topic/drug>

 Copyright © 2007 by SAGE Publications, inc.

 Copyright © 2007 by SAGE Publications, inc.

APA

Waskey, A. J. (2007). Drugs. In P. Robbins, *Encyclopedia of environment and society*. Thousand Oaks, CA: Sage Publications. Retrieved from <https://search.credoreference.com/content/topic/drug>

Chicago

Waskey, Andrew J. "Drugs." In *Encyclopedia of Environment and Society*, by Paul Robbins. Sage Publications, 2007. <https://search.credoreference.com/content/topic/drug>

Harvard

Waskey, A.J. (2007). Drugs. In P. Robbins, *Encyclopedia of environment and society*. [Online]. Thousand Oaks: Sage Publications. Available from: <https://search.credoreference.com/content/topic/drug> [Accessed 21 May 2019].

MLA

Waskey, Andrew J. "Drugs." *Encyclopedia of Environment and Society*, Paul Robbins, Sage Publications, 1st edition, 2007. *Credo Reference*, <https://search.credoreference.com/content/topic/drug>. Accessed 21 May 2019.