



[Home](#) → [Medical Encyclopedia](#) → High blood pressure - medicine-related

URL of this page: //medlineplus.gov/ency/article/000155.htm

High blood pressure - medicine-related

Drug-induced hypertension is high blood pressure caused by a chemical substance or medicine.

Causes

Blood pressure is determined by the:

- Amount of blood the heart pumps
- Condition of the heart valves
- Pulse rate
- Pumping power of the heart
- Size and condition of the arteries

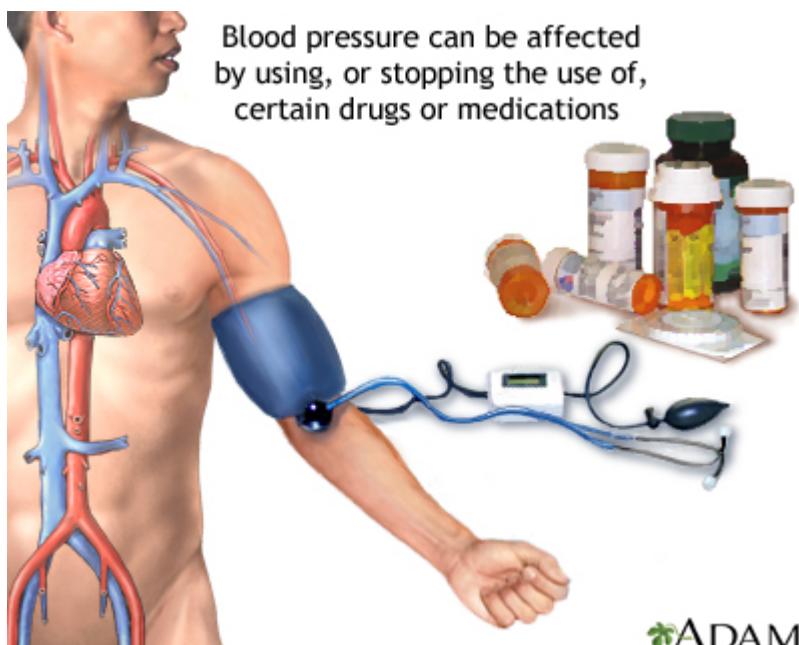
There are several types of high blood pressure:

- Essential hypertension has no cause that can be found (many different genetic traits contribute to essential hypertension, each one having a relatively small effect).
- Secondary hypertension occurs because of another disorder.
- Drug-induced hypertension is a form of secondary hypertension caused by the effects of a chemical substance or medicine.
- Pregnancy-induced hypertension.

Chemical substances and medicines that can cause high blood pressure include:

- Acetaminophen
- Alcohol, amphetamines, ecstasy (MDMA and derivatives), and cocaine
- Angiogenesis inhibitors (including tyrosine kinase inhibitors and monoclonal antibodies)
- Antidepressants (including venlafaxine, bupropion, and desipramine)
- Black licorice
- Caffeine (including the caffeine in coffee and energy drinks)
- Corticosteroids and mineralocorticoids
- Ephedra and many other herbal products

- Erythropoietin
- Estrogens (including birth control pills)
- Immunosuppressants (such as cyclosporine)
- Many over-the-counter medicines such as cough/cold and asthma medicines, particularly when the cough/cold medicine is taken with certain antidepressants, such as tranylcypromine or tricyclics
- Migraine medicines
- Nasal decongestants
- Nicotine
- Nonsteroidal anti-inflammatory drugs (NSAIDs)
- Phentermine (a weight loss medicine)
- Testosterone and other anabolic steroids and performance-enhancing medicines
- Thyroid hormone (when taken in excess)
- Yohimbine (and Yohimbe extract)



Rebound hypertension occurs when blood pressure rises after you stop taking or lower the dose of a medicine (typically a medicine you are taking to lower high blood pressure).

- This is common for medicines that block the sympathetic nervous system like beta blockers and clonidine.
- Talk to your health care provider to see if your medicine needs to be gradually tapered before stopping.

Many other factors can also affect blood pressure, including:

- Age
- Condition of the kidneys, nervous system, or blood vessels
- Genetics
- Foods eaten, weight, and other body-related variables, including the amount of added sodium in processed foods
- Levels of various hormones in the body

- Volume of water in the body

Alternative Names

Hypertension - medication related; Drug-induced hypertension

References

Azizi M, Lorthioir A, Amar L. Resistant hypertension. In: Bakris GL, Sorrentino MJ, Laffin LJ, eds. *Hypertension: A Companion to Braunwald's Heart Disease*. 4th ed. Philadelphia, PA: Elsevier; 2024:chap 47.

Foy MC, Vaishnav J, Sperati CJ. Drug-induced hypertension. *Endocrinol Metab Clin North Am*. 2019;48(4):859-873. PMID: 31655781 pubmed.ncbi.nlm.nih.gov/31655781/ [https://pubmed.ncbi.nlm.nih.gov/31655781/].

Jurca SJ, Elliott WJ. Common substances that may contribute to resistant hypertension, and recommendations for limiting their clinical effects. *Curr Hypertens Rep*. 2016;18(10):73. PMID: 27671491 pubmed.ncbi.nlm.nih.gov/27671491/ [https://pubmed.ncbi.nlm.nih.gov/27671491/].

Peixoto AJ. Secondary hypertension. In: Gilbert S, ed. *National Kidney Foundation Primer on Kidney Diseases*. 8th ed. Philadelphia, PA: Elsevier; 2023:chap 65.

Review Date 10/27/2024

Updated by: Laura J. Martin, MD, MPH, ABIM Board Certified in Internal Medicine and Hospice and Palliative Medicine, Atlanta, GA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

Learn how to cite this page



A.D.A.M., Inc. is accredited by URAC, for Health Content Provider (www.urac.org). URAC's [accreditation program](#) is an independent audit to verify that A.D.A.M. follows rigorous standards of quality and accountability. A.D.A.M. is among the first to achieve this important distinction for online health information and services. Learn more about A.D.A.M.'s [editorial policy](#), [editorial process](#), and [privacy policy](#).

Health Content
Provider
06/01/2028

The information provided herein should not be used during any medical emergency or for the diagnosis or treatment of any medical condition. A licensed medical professional should be consulted for diagnosis and treatment of any and all medical conditions. Links to other sites are provided for information only – they do not constitute endorsements of those other sites. No warranty of any kind, either expressed or implied, is made as to the accuracy, reliability, timeliness, or correctness of any translations made by a third-party service of the information provided herein into any other language. © 1997-2025 A.D.A.M., a business unit of Ebix, Inc. Any duplication or distribution of the information contained herein is strictly prohibited.

