

HIV Treatment

What is a Drug Interaction?

Last Reviewed: August 4, 2021

Key Points

- A [drug interaction](#) is a reaction between two (or more) drugs or between a drug and a food, beverage, or supplement. Taking a drug while having certain medical conditions can also cause a drug interaction. For example, taking a nasal decongestant if you have high blood pressure may cause an unwanted reaction.
- A drug interaction can affect how a drug works or cause unwanted side effects.
- Treatment with HIV medicines (called [antiretroviral therapy or ART](#)) helps people with HIV live longer, healthier lives and reduces the risk of HIV [transmission](#). But drug interactions can complicate HIV treatment.
- Health care providers carefully consider potential drug interactions before recommending an HIV [treatment regimen](#). Before taking HIV medicines, tell your health care provider about all prescription and nonprescription medicines, vitamins, nutritional supplements, and herbal products you are taking or plan to take.

What is a drug interaction?

Medicines help us feel better and stay healthy. But sometimes [drug interactions](#) can cause problems. There are three types of drug interactions:

- [Drug-drug interaction](#): A reaction between two (or more) drugs.
- [Drug-food interaction](#): A reaction between a drug and a food or beverage.
- Drug-condition interaction: A reaction that occurs when taking a drug while having a certain medical condition. For example, taking a nasal decongestant if you have high blood pressure may cause an unwanted reaction.

A drug interaction can affect how a drug works or cause unwanted side effects.

Do HIV medicines ever cause drug interactions?

Treatment with HIV medicines (called [antiretroviral therapy or ART](#)) helps people with HIV live longer, healthier lives and reduces the risk of HIV [transmission](#). But drug interactions, especially drug-drug interactions, can complicate HIV treatment.

Drug-drug interactions between different HIV medicines and between HIV medicines and other medicines are common. Before recommending an HIV [treatment regimen](#), health care providers carefully consider potential drug-drug interactions between HIV medicines. They also ask about other medicines a person may be taking. For example, some HIV medicines may make hormonal birth control less effective, so women using hormonal contraceptives may need to use an additional or different method of birth control to prevent pregnancy. For more information about using birth control and HIV medicines at the same time, view the [HIV and Birth Control](#) infographic from HIVinfo.

Can drug-food interactions and drug-condition interactions affect people taking HIV medicines?

Yes, the use of HIV medicines can lead to both drug-food interactions and drug-condition interactions.

Food can affect the absorption of some HIV medicines and increase or reduce the concentration of the medicine in the blood. Depending on the HIV medicine, the change in concentration may be helpful or harmful. Directions on how to take HIV medicines specify whether to take the medicine with food or on an empty stomach. Some HIV medicines can be taken with or without food, because food does not affect their absorption.

Conditions, such as kidney disease, hepatitis, and pregnancy, can affect how the body processes HIV medicines. The dosing of some HIV medicines may need to be adjusted in people with certain medical conditions.

How can a person avoid drug interactions?

You can take the following steps to avoid drug interactions:

- **Tell your health care provider about all prescription and nonprescription medicines you are taking or plan to take. Also tell your health care provider about any vitamins, nutritional supplements, and herbal products you take.**
- **Tell your health care provider about any other conditions you may have, such as high blood pressure or diabetes.**
- Before taking a medicine, ask your health care provider or pharmacist the following questions:
 - What is the medicine used for?
 - How should I take the medicine?
 - While taking the medicine, should I avoid any other medicines or certain foods or beverages?
 - Can I take this medicine safely with the other medicines that I am taking? Are there any possible drug interactions I should know about? What are the signs of those drug interactions?
 - In the case of a drug interaction, what should I do?
- Take medicines according to your health care provider's instructions. Always read the information and directions that come with a medicine. Drug labels and package inserts include important information about possible drug interactions.

This fact sheet is based on information from the following sources:

From the Department of Health and Human Services:

- Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV:
 - [Drug-Drug Interactions](#)
 - Considerations for Antiretroviral Use in Special Patient Populations: [HIV and the Older Person](#), [Transgender People with HIV](#), and [Women with HIV](#)

From the U.S. Food and Drug Administration:

- [Drug Interactions: What You Should Know](#)

From the National Institute on Aging:

- [Safe Use of Medicines for Older Adults](#)

Also see the [HIV Source](#) collection of HIV links and resources.