



# Harmful Interactions

mixing **alcohol**  
with **medicines**



National Institute  
on Alcohol Abuse  
and Alcoholism





# Harmful interactions

You've probably seen this warning on medicines you've taken. The danger is real. Mixing alcohol with certain medications can cause nausea and vomiting, headaches, drowsiness, fainting, or loss of coordination. It also can put you at risk for internal bleeding, heart problems, and difficulties in breathing. In addition to these dangers, alcohol can make a medication less effective or even useless, or it may make the medication harmful or toxic to your body.

Some medicines that you might never have suspected can react with alcohol, including many medications which can be purchased “over-the-counter”—that is, without a prescription. Even some herbal remedies can have harmful effects when combined with alcohol.

This pamphlet lists medications that can cause harm when taken with alcohol and describes the effects that

can result. The list gives the brand name by which each medicine is commonly known (for example, Benadryl®) and its generic name or active ingredient (in Benadryl®, this is diphenhydramine). **The list presented here does not include all the medicines that may interact harmfully with alcohol. Most important, the list does not include all the ingredients in every medication.**

Medications typically are safe and effective when used appropriately. Your pharmacist or other health care provider can help you determine which medications interact harmfully with alcohol.

## **DID YOU KNOW...**

Mixing alcohol and medicines can be harmful. Alcohol, like some medicines, can make you sleepy, drowsy, or lightheaded. Drinking alcohol while taking medicines can intensify these effects. You may have trouble concentrating or performing mechanical skills. Small amounts of alcohol can make it dangerous to drive, and when you mix alcohol with certain medicines you put yourself at even greater risk. Combining alcohol with some medicines can lead to falls and serious injuries, especially among older people.

### **MEDICINES MAY HAVE MANY INGREDIENTS**

Some medications—including many popular painkillers and cough, cold, and allergy remedies—contain more than one ingredient that can react with alcohol. Read the label on the medication bottle to find out exactly what ingredients a medicine contains. Ask your pharmacist if you have any questions about how alcohol might interact with a drug you are taking.



### **SOME MEDICINES CONTAIN ALCOHOL**

Certain medicines contain up to 10 percent alcohol. Cough syrup and laxatives may have some of the highest alcohol concentrations.

### **ALCOHOL AFFECTS WOMEN DIFFERENTLY**

Women, in general, have a higher risk for problems than men. When a woman drinks, the alcohol in her bloodstream typically reaches a higher level than a man's even if both are drinking the same amount. This is because women's bodies generally have less water than men's bodies. Because alcohol mixes with body water, a given amount of alcohol is more concentrated in a woman's body than in a man's. As a result, women are more susceptible to alcohol-related damage to organs such as the liver.

**OLDER PEOPLE FACE  
GREATER RISK**

Older people are at particularly high risk for harmful alcohol–medication interactions. Aging slows the body’s ability to break down alcohol, so alcohol remains in a person’s system longer. Older people also are more likely to take a medication that interacts with alcohol—in fact, they often need to take more than one of these medications.

**TIMING IS IMPORTANT**

Alcohol and medicines can interact harmfully even if they are not taken at the same time.

**REMEMBER...**

Mixing alcohol and medicines puts you at risk for dangerous reactions. Protect yourself by avoiding alcohol if you are taking a medication and don’t know its effect. To learn more about a medicine and whether it will interact with alcohol, talk to your pharmacist or other health care provider.

**Commonly Used Medicines (Both Prescription and Over-the-Counter)  
That Interact With Alcohol**

| Symptoms/<br>Disorders                               | Medication<br>(Brand name)   | Medication<br>(Generic name)   | Some possible<br>reactions with alcohol   |
|--|--|--|---|
| Allergies/<br>colds/flu                              | <ul style="list-style-type: none"><li>• Alavert®</li><li>• Atarax®</li><li>• Benadryl®</li><li>• Clarinex®</li><li>• Claritin®,<br/>Claritin-D®</li><li>• Dimetapp®<br/>Cold &amp; Allergy</li><li>• Sudafed®<br/>Sinus &amp; Allergy</li><li>• Triaminic®<br/>Cold &amp; Allergy</li><li>• Tylenol®<br/>Allergy Sinus</li><li>• Tylenol®<br/>Cold &amp; Flu</li><li>• Zyrtec®</li></ul> | <ul style="list-style-type: none"><li>Loratadine</li><li>Hydroxyzine</li><li>Diphenhydramine</li><li>Desloratadine</li><li>Loratadine</li><li>Brompheniramine</li><li>Chlorpheniramine</li><li>Chlorpheniramine</li><li>Chlorpheniramine</li><li>Chlorpheniramine</li><li>Cetirizine</li></ul> | Drowsiness,<br>dizziness;<br>increased risk<br>for overdose                     |
| Angina<br>(chest pain),<br>coronary<br>heart disease | <ul style="list-style-type: none"><li>• Isordil®</li></ul>   | <ul style="list-style-type: none"><li>Isosorbide</li><li>Nitroglycerin</li></ul>   | Rapid heartbeat,<br>sudden changes<br>in blood pressure,<br>dizziness, fainting |

## Commonly Used Medicines (Both Prescription and

| Symptoms/<br>Disorders   | Medication<br>(Brand name)  | Medication<br>(Generic name)  | Some possible<br>reactions with alcohol  |
|--|---|---|--|
| Anxiety<br>and<br>epilepsy   | <ul style="list-style-type: none"> <li>• Ativan®</li> <li>• BuSpar®</li> <li>• Klonopin®</li> <li>• Librium®</li> <li>• Paxil®</li> <li>• Valium®</li> <li>• Xanax®</li> </ul>        | Lorazepam<br>Buspirone<br>Clonazepam<br>Chlordiazepoxide<br>Paroxetine<br>Diazepam<br>Alprazolam  | Drowsiness, dizziness;<br>increased risk for<br>overdose; slowed or<br>difficulty breathing;<br>impaired motor control;<br>unusual behavior;<br>memory problems<br><br>Liver damage,<br>drowsiness   |
| Arthritis  | <ul style="list-style-type: none"> <li>• Celebrex®</li> <li>• Naprosyn®</li> <li>• Voltaren®</li> </ul>   | Celecoxib<br>Naproxen<br>Diclofenac   | Ulcers, stomach<br>bleeding, liver<br>damage   |
| Attention and<br>concentration<br>(Attention<br>deficit/<br>hyperactivity<br>disorder) | <ul style="list-style-type: none"> <li>• Adderall®</li> <li>• Concerta®,<br/>Ritalin®</li> <li>• Dexedrine®</li> <li>• Focalin®</li> <li>• Stratterra®</li> <li>• Vyvanse®</li> </ul> | Amphetamine/<br>dextro-amphetamine<br>Methylphenidate<br><br>Dextroamphetamine<br>Dexmethylphenidate<br>Atomoxetine<br>Lisdexamfetamine | Dizziness, drowsiness,<br>impaired concentration<br>(methylphenidate,<br>dexmethylphenidate);<br>possible increased risk<br>for heart problems<br>(amphetamine, dex-<br>troamphetamine, lis-<br>dexamphetamine); liver<br>damage (atomoxetine) |
| Blood clots  | <ul style="list-style-type: none"> <li>• Coumadin®</li> </ul>   | Warfarin  | Occasional drinking<br>may lead to internal<br>bleeding; heavier<br>drinking also may<br>cause bleeding or<br>may have the opposite<br>effect, resulting in<br>possible blood clots,<br>strokes, or heart attacks                              |
| Cough  | <ul style="list-style-type: none"> <li>• Delsym®,<br/>Robitussin Cough®</li> <li>• Robitussin A-C®</li> </ul>   | Dextromethorpan<br><br>Guaifenesin + codeine  | Drowsiness, dizziness;<br>increased risk<br>for overdose   |

## Over-the-Counter) That Interact With Alcohol

| Symptoms/<br>Disorders | Medication<br>(Brand name)  | Medication<br>(Generic name)  | Some possible<br>reactions with alcohol  |
|------------------------|---|---|--|
| Depression             | <ul style="list-style-type: none"> <li>• Abilify®</li> <li>• Anafranil®</li> <li>• Celexa®</li> <li>• Clozaril®</li> <li>• Cymbalta®</li> <li>• Desyrel®</li> <li>• Effexor®</li> <li>• Elavil®</li> <li>• Geodon®</li> <li>• Invega®</li> <li>• Lexapro®</li> <li>• Luvox®</li> <li>• Nardil®</li> <li>• Norpramin®</li> <li>• Parnate®</li> <li>• Paxil®</li> <li>• Pristiq®</li> <li>• Prozac®</li> <li>• Remeron®</li> <li>• Risperdal®</li> <li>• Seroquel®</li> <li>• Serzone®</li> <li>• Symbyax®</li> <li>• Wellbutrin®</li> <li>• Zoloff®</li> <li>• Zyprexa</li> <li>• Herbal preparations (St. John's Wort)</li> </ul> | <ul style="list-style-type: none"> <li>Aripiprazole</li> <li>Clomipramine</li> <li>Citalopram</li> <li>Clozapine</li> <li>Duloxetine</li> <li>Trazodone</li> <li>Venlafaxine</li> <li>Amitriptyline</li> <li>Ziprasidone</li> <li>Paliperidone</li> <li>Escitalopram</li> <li>Fluvoxamine</li> <li>Phenelzine</li> <li>Desipramine</li> <li>Tranlycypromine</li> <li>Paroxetine</li> <li>Desevenlafaxine</li> <li>Fluoxetine</li> <li>Mirtazapine</li> <li>Risperidone</li> <li>Quetiapine</li> <li>Nefazodone</li> <li>Fluoxetine/Olanzapine</li> <li>Bupropion</li> <li>Sertraline</li> <li>Olanzapine</li> </ul> | <p>Drowsiness, dizziness; increased risk for overdose; increased feelings of depression or hopelessness (all medications); impaired motor control (quetiapine, mirtazapine); increased alcohol effect (bupropion); liver damage (duloxetine)</p> <p>Monoamine oxidase inhibitors (MAOIs), such as tranlycypromine and phenelzine, when combined with alcohol, may result in serious heart-related side effects. Risk for dangerously high blood pressure is increased when MAOIs are mixed with tyramine, a byproduct found in beer and red wine</p> |
| Diabetes               | <ul style="list-style-type: none"> <li>• Diabinese®</li> <li>• Glucotrol®</li> <li>• Glucophage®</li> <li>• Glynase®, DiaBeta®, Micronase®</li> <li>• Orinase®</li> <li>• Tolinase®</li> </ul>  | <ul style="list-style-type: none"> <li>Chlorpropamide</li> <li>Glipizide</li> <li>Metformin</li> <li>Glyburide</li> <li>Tolbutamide</li> <li>Tolazamide</li> </ul>  | <p>Abnormally low blood sugar levels, flushing reaction (nausea, vomiting, headache, rapid heartbeat, sudden changes in blood pressure); symptoms of nausea and weakness may occur (metformin)</p>   |
| Enlarged prostate      | <ul style="list-style-type: none"> <li>• Cardura®</li> <li>• Flomax®</li> <li>• Hytrin®</li> <li>• Minipress®</li> </ul>  | <ul style="list-style-type: none"> <li>Doxazosin</li> <li>Tamsulosin</li> <li>Terazosin</li> <li>Prazosin</li> </ul>  | <p>Dizziness, light headedness, fainting</p>   |

## Commonly Used Medicines (Both Prescription and

| Symptoms/<br>Disorders                     | Medication<br>(Brand name)  | Medication<br>(Generic name)   | Some possible<br>reactions with alcohol   |
|--|---|--|---|
| Heartburn,<br>indigestion,<br>sour stomach | <ul style="list-style-type: none"> <li>• Axid<sup>®</sup></li> <li>• Reglan<sup>®</sup></li> <li>• Tagamet<sup>®</sup></li> <li>• Zantac<sup>®</sup></li> </ul>   | Nizatidine<br>Metoclopramide<br>Cimetidine<br>Ranitidine   | Rapid heartbeat; increased alcohol effect; sudden changes in blood pressure (metoclopramide)  |
| High blood<br>pressure                     | <ul style="list-style-type: none"> <li>• Accupril<sup>®</sup></li> <li>• Calan<sup>®</sup></li> <li>• Capozide<sup>®</sup></li> <li>• Cardura<sup>®</sup></li> <li>• Catapres<sup>®</sup></li> <li>• Cozaar<sup>®</sup></li> <li>• Hytrin<sup>®</sup></li> <li>• Lopressor<sup>®</sup> HCT</li> <li>• Lotensin<sup>®</sup></li> <li>• Minipress<sup>®</sup></li> <li>• Norvasc<sup>®</sup></li> <li>• Prinivil<sup>®</sup>,<br/>Zestril<sup>®</sup></li> <li>• Vaseretic<sup>®</sup></li> </ul> | Quinapril<br>Verapamil<br>Hydrochlorothiazide<br>Doxazosin<br>Clonidine<br>Losartan<br>Terazosin<br>Hydrochlorothiazide<br>Benzapril<br>Prazosin<br>Amlodipine mesylate<br>Lisinopril<br><br>Enalapril | Dizziness, fainting, drowsiness; heart problems such as changes in the heart's regular heartbeat (arrhythmia)   |
| High<br>cholesterol                        | <ul style="list-style-type: none"> <li>• Advicor<sup>®</sup></li> <li>• Altacor<sup>®</sup></li> <li>• Crestor<sup>®</sup></li> <li>• Lipitor<sup>®</sup></li> <li>• Mevacor<sup>®</sup></li> <li>• Niaspan<sup>®</sup></li> <li>• Pravachol<sup>®</sup></li> <li>• Pravigard<sup>™</sup></li> <li>• Vytorin<sup>™</sup></li> <li>• Zocor<sup>®</sup></li> </ul>  | Lovastatin + Niacin<br>Lovastatin<br>Rosuvastatin<br>Atorvastatin<br>Lovastatin<br>Niacin<br>Pravastatin<br>Pravastatin +<br>Aspirin<br>Ezetimibe +<br>Simvastatin<br>Simvastatin                      | Liver damage (all medications); increased flushing and itching (niacin), increased stomach bleeding (pravastatin + aspirin)   |
| Infections                                 | <ul style="list-style-type: none"> <li>• Acrodantin<sup>®</sup></li> <li>• Flagyl<sup>®</sup></li> <li>• Grisactin<sup>®</sup></li> <li>• Nizoral<sup>®</sup></li> <li>• Nydrazid<sup>®</sup></li> <li>• Seromycin<sup>®</sup></li> <li>• Tindamax<sup>®</sup></li> <li>• Zithromax<sup>®</sup></li> </ul>  | Nitrofurantoin<br>Metronidazole<br>Griseofulvin<br>Ketoconazole<br>Isoniazid<br>Cycloserine<br>Tinidazole<br>Azithromycin  | Fast heartbeat, sudden changes in blood pressure; stomach pain, upset stomach, vomiting, headache, or flushing or redness of the face; liver damage (isoniazid, ketoconazole) |



Over-the-Counter) That Interact With Alcohol

| Symptoms/<br>Disorders   | Medication<br>(Brand name)   | Medication<br>(Generic name)  | Some possible<br>reactions with alcohol  |
|--|--|---|--|
| Mood<br>stabilizers  | <ul style="list-style-type: none"><li>Depakene®, Depakote®</li><li>Eskalith®, Eskalith®CR, Lithobid</li></ul>  | <p>Valproic acid</p> <p>Lithium</p>   | Drowsiness, dizziness; tremors; increased risk for side effects, such as restlessness, impaired motor control; loss of appetite; stomach upset; irregular bowel movement; joint or muscle pain; depression; liver damage (valproic acid) |
| Muscle pain  | <ul style="list-style-type: none"><li>Flexeril®</li><li>Soma®</li></ul>  | <p>Cyclobenzaprine</p> <p>Carisoprodol</p>  | Drowsiness, dizziness; increased risk of seizures; increased risk for overdose; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems  |
| Nausea,<br>motion<br>sickness  | <ul style="list-style-type: none"><li>Antivert®</li><li>Dramamine®</li><li>Phenergan®</li></ul>  | <p>Meclizine</p> <p>Dimenhydrinate</p> <p>Promethazine</p>  | Drowsiness, dizziness; increased risk for overdose   |
| Pain<br>(such as<br>muscle ache,<br>minor arthritis<br>pain), fever,<br>inflammation | <ul style="list-style-type: none"><li>Advil®</li><li>Aleve®</li><li>Excedrin®</li><li>Motrin®</li><li>Tylenol®</li></ul>   | <p>Ibuprofen</p> <p>Naproxen</p> <p>Aspirin,</p> <p>Acetaminophen</p> <p>Ibuprofen</p> <p>Acetaminophen</p>   | Stomach upset, bleeding and ulcers; liver damage (acetaminophen); rapid heartbeat  |
| Seizures   | <ul style="list-style-type: none"><li>Dilantin®</li><li>Horizant®, Neurontin®</li><li>Keppra®</li><li>Klonopin®</li><br/><li>Lamictal®</li><li>Lyrica®</li><li>Tegretol®</li><li>Topamax®</li><li>Trileptal®</li></ul> | <p>Phenytoin</p> <p>Gabapentin</p><br><p>Levetiracetam</p> <p>Clonazepam</p><br><p>Phenobarbital</p> <p>Lamotrigine</p> <p>Pregabalin</p> <p>Carbamazepine</p> <p>Topiramate</p> <p>Oxcarbazepine</p> <p>Barbiturates</p> | Drowsiness, dizziness; increased risk of seizures (levetiracetam, phenytoin); unusual behavior and changes in mental health (such as thoughts of suicide) (topiramate)   |

## Commonly Used Medicines (Both Prescription and Over-the-Counter) That Interact With Alcohol

| Symptoms/<br>Disorders   | Medication<br>(Brand name)  | Medication<br>(Generic name)   | Some possible<br>reactions with alcohol  |
|--|---|--|--|
| Severe pain<br>from injury,<br>postsurgical<br>care, oral<br>surgery,<br>migraines | <ul style="list-style-type: none"> <li>• Darvocet–N®</li> <li>• Demerol®</li> <li>• Fiorinal®<br/>with codeine</li> <li>• Percocet®</li> <li>• Vicodin®</li> </ul>  | <ul style="list-style-type: none"> <li>Propoxyphene</li> <li>Merepidine</li> <li>Butalbital + codeine</li> <li>Oxycodone</li> <li>Hydrocodone</li> </ul>           | Drowsiness, dizziness;<br>increased risk for overdose;<br>slowed or difficulty<br>breathing; impaired motor<br>control; unusual behavior;<br>memory problems   |
| Sleep<br>problems  | <ul style="list-style-type: none"> <li>• Ambien®</li> <li>• Lunesta™</li> <li>• Prosom™</li> <li>• Restoril®</li> <li>• Sominex®</li> <li>• Unisom®</li> <li>• Herbal<br/>preparations<br/>(chamomile,<br/>valerian, lavender)</li> </ul> | <ul style="list-style-type: none"> <li>Zolpidem</li> <li>Eszopiclone</li> <li>Estazolam</li> <li>Temazepam</li> <li>Diphenhydramine</li> <li>Doxylamine</li> </ul> | <ul style="list-style-type: none"> <li>Drowsiness, sleepiness,<br/>dizziness; slowed or<br/>difficulty breathing; impaired<br/>motor control; unusual<br/>behavior; memory problems</li> <li>Increased drowsiness</li> </ul> |

# Additional resources

## **MedlinePlus**

A service of the U.S. National Library of Medicine and the National Institutes of Health.

<http://www.nlm.nih.gov/medlineplus/druginformation.html>

Provides information on prescription and over-the-counter medications.

## **National Institute on Alcohol Abuse and Alcoholism**

<http://www.niaaa.nih.gov>

Phone number: 301-443-3860

Makes available free informational materials on alcohol use, alcohol abuse, and alcoholism.

## **U.S. Food and Drug Administration**

Center for Drug Evaluation and Research:

<http://www.fda.gov/cder>.

Drug Interactions:

<http://www.fda.gov/drugs/resourcesfor you/ucm163354.htm>

Phone numbers:

- Main FDA for general inquiries:  
1-888-INFO-FDA (1-888-463-6332)
- To submit a report about Adverse Drug Reaction: Medwatch:  
1-800-FDA-1088

Provides information on prescription and over-the-counter medications, consumer drug information, and reports and publications.

**NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM**

***NIH . . . Turning Discovery Into Health***

**NIH Publication No. 20-AA-5329**

**Published 2003**

**Revised and reprinted November 2020**