

# Harmful Interactions

mixing alcohol with medicines







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.

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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

Medication	3.8 P. 12	
(Brand name)	Medication (Generic name)	Some possible reactions with alcohol
<ul> <li>Alavert®</li> <li>Atarax®</li> <li>Benadryl®</li> <li>Clarinex®</li> <li>Claritin®, Claritin-D®</li> <li>Dimetapp® Cold &amp; Allergy</li> <li>Sudafed® Sinus &amp; Allergy</li> <li>Triaminic® Cold &amp; Allergy</li> <li>Tylenol® Allergy Sinus</li> <li>Tylenol® Cold &amp; Flu</li> <li>Zyrtec®</li> </ul>	Loratadine Hydroxyzine Diphenhydramine Desloratadine Loratadine Brompheniramine Chlorpheniramine Chlorpheniramine Chlorpheniramine Chlorpheniramine Chlorpheniramine Chlorpheniramine	Drowsiness, dizziness; increased risk for overdose
• Isordil®	Isosorbide Nitroglycerin	Rapid heartbeat, sudden changes in blood pressure, dizziness, fainting
	• Alavert® • Atarax® • Benadryl® • Clarinex® • Claritin®, Claritin-D® • Dimetapp® Cold & Allergy • Sudafed® Sinus & Allergy • Triaminic® Cold & Allergy • Tylenol® Allergy Sinus • Tylenol® Cold & Flu • Zyrtec®	<ul> <li>(Brand name)</li> <li>(Generic name)</li> <li>Alavert®</li> <li>Atarax®</li> <li>Benadryl®</li> <li>Clarinex®</li> <li>Clarinex®</li> <li>Claritin®,</li> <li>Claritin-D®</li> <li>Dimetapp®</li> <li>Cold &amp; Allergy</li> <li>Sudafed®</li> <li>Sinus &amp; Allergy</li> <li>Triaminic®</li> <li>Cold &amp; Allergy</li> <li>Tylenol®</li> <li>Allergy Sinus</li> <li>Tylenol®</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Chlorpheniramine</li> <li>Cold &amp; Flu</li> <li>Zyrtec®</li> <li>Isosorbide</li> </ul>

## Commonly Used Medicines (Both Prescription and

Symptoms/ Disorders	Medication (Brand name)	Medication (Generic name)	Some possible reactions with alcohol
Anxiety and epilepsy	<ul> <li>Ativan®</li> <li>BuSpar®</li> <li>Klonopin®</li> <li>Librium®</li> <li>Paxil®</li> <li>Valium®</li> <li>Xanax®</li> </ul>	Lorazepam Buspirone Clonazepam Chlordiazepoxide Paroxetine Diazepam Alprazolam	Drowsiness, dizziness; increased risk for overdose; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems
	<ul> <li>Herbal preparations (Kava Kava)</li> </ul>		Liver damage, drowsiness
Arthritis	<ul> <li>Celebrex®</li> <li>Naprosyn®</li> <li>Voltaren®</li> </ul>	Celecoxib Naproxen Diclofenac	Ulcers, stomach bleeding, liver damage
Attention and concentration (Attention deficit/ hyperactivity disorder)	<ul> <li>Adderall<sup>®</sup></li> <li>Concerta<sup>®</sup>, Ritalin<sup>®</sup></li> <li>Dexedrine<sup>®</sup></li> <li>Focalin<sup>®</sup></li> <li>Strattera<sup>®</sup></li> <li>Vyvanse<sup>®</sup></li> </ul>	Amphetamine/ dextro-amphetamine Methylphenidate  Dextroamphetamine Dexmethylphenidate Atomoxetine Lisdexamfetamine	Dizziness, drowsiness, impaired concentration (methylphenidate, dexmethylphenidate); possible increased risk for heart problems (amphetamine, dextroamphetamine, lisdexamfetamine); liver damage (atomoxetine)
Blood clots	• Coumadin®	Warfarin	Occasional drinking may lead to internal bleeding; heavier drinking also may cause bleeding or may have the opposite effect, resulting in possible blood clots, strokes, or heart attacks
Cough	<ul> <li>Delsym<sup>®</sup>,         Robitussin Cough<sup>®</sup></li> <li>Robitussin A–C<sup>®</sup></li> </ul>	Dextromethorpan  Guaifenesin + codeine	Drowsiness, dizziness; increased risk for overdose

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

Symptoms/ Disorders	Medication (Brand name)	Medication (Generic name)	Some possible reactions with alcohol
Depression	<ul> <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>Lexapro®</li> <li>Luvox®</li> <li>Nardil®</li> <li>Norpramin®</li> <li>Parnate®</li> <li>Paristiq®</li> <li>Pristiq®</li> <li>Prozac®</li> <li>Remeron®</li> <li>Risperdal®</li> <li>Seroquel®</li> <li>Seroquel®</li> <li>Serzone®</li> <li>Symbyax®</li> <li>Wellbutrin®</li> <li>Zoloft®</li> <li>Zyprexa</li> <li>Herbal preparatic (St. John's Wort)</li> </ul>	Aripriprazone Clomipramine Citalopram Clozapine Duloxetine Trazodone Venlafaxine Amitriptyline Ziprasidone Paliperidone Escitalopram Fluvoxamine Phenelzine Desipramine Tranylcypromine Paroxetine Desevenlafaxine Fluoxetine Mirtazapine Risperidone Quetiapine Nefazodone Fluoxetine/Olanzapine Bupropion Sertraline Olanzapine	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)  Monoamine oxidase inhibitors (MAOIs), such as tranylcypromine 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
Diabetes	<ul> <li>Diabinese<sup>®</sup></li> <li>Glucotrol<sup>®</sup></li> <li>Glucophage<sup>®</sup></li> <li>Glynase<sup>®</sup>, DiaBeta<sup>®</sup>, Micronase<sup>®</sup></li> <li>Orinase<sup>®</sup></li> <li>Tolinase<sup>®</sup></li> </ul>	Chlorpropamide Glipizide Metformin Glyburide  Tolbutamide Tolazamide	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)
Enlarged prostate	• Cardura® • Flomax® • Hytrin® • Minipress®	Doxazosin Tamsulosin Terazosin Prazosin	Dizziness, light headedness, fainting

## Commonly Used Medicines (Both Prescription and

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Symptoms/ Disorders	Medication (Brand name)	Medication (Generic name)	Some possible reactions with alcohol
Heartburn, indigestion, sour stomach	<ul> <li>Axid®</li> <li>Reglan®</li> <li>Tagamet®</li> <li>Zantac®</li> </ul>	Nizatidine Metoclopramide Cimetidine Ranitidine	Rapid heartbeat; increased alcohol effect; sudden changes in blood pressure (metoclopramide)
High blood pressure	<ul> <li>Accupril®</li> <li>Calan®</li> <li>Capozide®</li> <li>Cardura®</li> <li>Catapres®</li> <li>Cozaar®</li> <li>Hytrin®</li> <li>Lopressor® HCT</li> <li>Lotensin®</li> <li>Minipress®</li> <li>Norvasc®</li> <li>Prinivil®, Zestril®</li> <li>Vaseretic®</li> </ul>	Quinapril Verapamil Hydrochlorothiazide Doxazosin Clonidine Losartan Terazosin Hydrochlorothiazide Benzapril Prazosin Amlodipine mesylate Lisinopril Enalapril	Dizziness, fainting, drowsiness; heart problems such as changes in the heart's regular heartbeat (arrhythmia)
High cholesterol	<ul> <li>Advicor®</li> <li>Altocor®</li> <li>Crestor®</li> <li>Lipitor®</li> <li>Mevacor®</li> <li>Niaspan®</li> <li>Pravachol®</li> <li>Pravigard™</li> <li>Vytorin™</li> <li>Zocor®</li> </ul>	Lovastatin + Niacin Lovastatin Rosuvastatin Atorvastatin Lovastatin Niacin Pravastatin Pravastatin Pravastatin + Aspirin Ezetimibe + Simvastatin Simvastatin	Liver damage (all medications); increased flushing and itching (niacin), increased stomach bleeding (pravastatin + aspirin)
Infections	<ul> <li>Acrodantin®</li> <li>Flagyl®</li> <li>Grisactin®</li> <li>Nizoral®</li> <li>Nydrazid®</li> <li>Seromycin®</li> <li>Tindamax®</li> <li>Zithromax®</li> </ul>	Nitrofurantoin Metronidazole Griseofulvin Ketoconazole Isoniazid Cycloserine Tinidazole 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)
	Heartburn, indigestion, sour stomach  High blood pressure  High cholesterol	Heartburn, indigestion, sour stomach High blood pressure  High blood - Calan® - Cardura® - Catapres® - Cozaar® - Hytrin® - Lopressor® HCT - Lotensin® - Minipress® - Norvasc® - Prinivil®, Zestril® - Vaseretic®  High cholesterol  High - Advicor® - Crestor® - Lipitor® - Mevacor® - Lipitor® - Minspan® - Pravachol® - Pravigard™  - Vytorin™  - Zocor®  Infections  Medication (Brand name)  Axid® - Reglan® - Reglan® - Reglan® - Reglan® - Reglan® - Pravigard™  - Vytorin™  - Zocor®  Infections  Acrodantin® - Flagyl® - Grisactin® - Nizoral® - Seromycin® - Tindamax®	Nedication (Brand name)   Nizatidine (Generic name)

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

Symptoms/ Disorders	Medication (Brand name)	Medication (Generic name)	Some possible reactions with alcohol
Mood stabilizers	<ul> <li>Depakene<sup>®</sup>, Depakote<sup>®</sup></li> <li>Eskalith<sup>®</sup>, Eskalith<sup>®</sup>CR, Lithobid</li> </ul>	Valproic acid Lithium	Drowsiness, dizziness; tremors; increased risk for side effects, such as rest- lessness, impaired motor control; loss of appetite; stomach upset; irregular bowel movement; joint or muscle pain; depression; liver damage (valproic acid)
Muscle pain	• Flexeril® • Soma®	Cyclobenzaprine Carisoprodol	Drowsiness, dizziness; increased risk of seizures; increased risk for overdose; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems
Nausea, motion sickness	<ul> <li>Antivert®</li> <li>Dramamine®</li> <li>Phenergan®</li> </ul>	Meclizine Dimenhydrinate Promethazine	Drowsiness, dizziness; increased risk for overdose
Pain (such as muscle ache, minor arthritis pain), fever, inflammation	• Motrin®	Ibuprofen Naproxen Aspirin, Acetaminophen Ibuprofen Acetaminophen	Stomach upset, bleeding and ulcers; liver damage (acetaminophen); rapid heartbeat
Seizures	<ul> <li>Dilantin®</li> <li>Horizant®, Neurontin®</li> <li>Keppra®</li> <li>Klonopin®</li> <li>Lamictal®</li> <li>Lyrica®</li> <li>Tegretol®</li> <li>Topamax®</li> <li>Trileptal®</li> </ul>	Phenytoin Gabapentin  Levetiracetam Clonazepam  Phenobarbital Lamotrigine Pregabalin Carbamazepine Topiramate Oxcarbazepine Barbiturates	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/ Disorders	Medication (Brand name)	Medication (Generic name)	Some possible reactions with alcohol
Severe pain from injury, postsurgical care, oral surgery, migraines	<ul> <li>Darvocet-N®</li> <li>Demerol®</li> <li>Fiorinal® with codeine</li> <li>Percocet®</li> <li>Vicodin®</li> </ul>	Propoxyphene Merepidine Butalbital + codeine Oxycodone Hydrocodone	Drowsiness, dizziness; increased risk for overdose; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems
Sleep problems	<ul> <li>Ambien®</li> <li>Lunesta™</li> <li>Prosom™</li> <li>Restoril®</li> <li>Sominex®</li> <li>Unisom®</li> <li>Herbal preparations (chamomile, valian, lavender)</li> </ul>	Zolpidem Eszopiclone Estazolam Temazepam Diphenhydramine Doxylamine	Drowsiness, sleepiness, dizziness; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems Increased drowsiness

# 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:
   I-888-INFO-FDA (I-888-463-6332)
- To submit a report about Adverse Drug Reaction: Medwatch: I–800–FDA–1088

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

