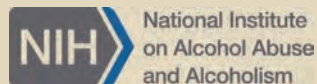




Harmful Interactions

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





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/ Disorders | Medication (Brand name) | Medication (Generic name) | Some possible reactions with alcohol |
|--|--------------------------------|------------------------------|---|
| Allergies/ colds/flu | • Alavert® | Loratadine | Drowsiness, dizziness; increased risk for overdose |
| | • Atarax® | Hydroxyzine | |
| | • Benadryl® | Diphenhydramine | |
| | • Clarinex® | Desloratadine | |
| | • Claritin®, Claritin-D® | Loratadine | |
| | • Dimetapp® Cold & Allergy | Brompheniramine | |
| | • Sudafed® Sinus & Allergy | Chlorpheniramine | |
| | • Triaminic® Cold & Allergy | Chlorpheniramine | |
| | • Tylenol® Allergy Sinus | Chlorpheniramine | |
| | • Tylenol® Cold & Flu | Chlorpheniramine | |
| • Zyrtec® | Cetirizine | | |
| Angina (chest pain), coronary heart disease | • Isordil® | Isosorbide Nitroglycerin | Rapid heartbeat, sudden changes in blood pressure, dizziness, fainting |

Commonly Used Medicines (Both Prescription and

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

Over-the-Counter) That Interact With Alcohol

| Symptoms/ Disorders | Medication (Brand name) | Medication (Generic name) | Some possible reactions with alcohol |
|---------------------|--|---|--|
| Depression | <ul style="list-style-type: none"> • Abilify[®] • Anafranil[®] • Celexa[®] • Clozaril[®] • Cymbalta[®] • Desyrel[®] • Effexor[®] • Elavil[®] • Geodon[®] • Invega[®] • Lexapro[®] • Luvox[®] • Nardil[®] • Norpramin[®] • Parnate[®] • Paxil[®] • Pristiq[®] • Prozac[®] • Remeron[®] • Risperdal[®] • Seroquel[®] • Serzone[®] • Symbyax[®] • Wellbutrin[®] • Zoloff[®] • Zyprexa • Herbal preparations (St. John's Wort) | <ul style="list-style-type: none"> Aripiprazole Clomipramine Citalopram Clozapine Duloxetine Trazodone Venlafaxine Amitriptyline Ziprasidone Paliperidone Escitalopram Fluvoxamine Phenelzine Desipramine Tranlycypromine Paroxetine Desevenlafaxine Fluoxetine Mirtazapine Risperidone Quetiapine Nefazodone Fluoxetine/Olanzapine Bupropion Sertraline Olanzapine | <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"> • Diabinese[®] • Glucotrol[®] • Glucophage[®] • Glynase[®], DiaBeta[®], Micronase[®] • Orinase[®] • Tolinase[®] | <ul style="list-style-type: none"> Chlorpropamide Glipizide Metformin Glyburide Tolbutamide Tolazamide | <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"> • Cardura[®] • Flomax[®] • Hytrin[®] • Minipress[®] | <ul style="list-style-type: none"> Doxazosin Tamsulosin Terazosin Prazosin | <p>Dizziness, light headedness, fainting</p> |

Commonly Used Medicines (Both Prescription and

| Symptoms/ Disorders | Medication (Brand name) | Medication (Generic name) | Some possible reactions with alcohol |
|--|---|--|---|
| Heartburn, indigestion, sour stomach | <ul style="list-style-type: none"> • Axid[®] • Reglan[®] • Tagamet[®] • Zantac[®] | <ul style="list-style-type: none"> Nizatidine Metoclopramide Cimetidine Ranitidine | Rapid heartbeat; increased alcohol effect; sudden changes in blood pressure (metoclopramide) |
| High blood pressure | <ul style="list-style-type: none"> • Accupril[®] • Calan[®] • Capozide[®] • Cardura[®] • Catapres[®] • Cozaar[®] • Hytrin[®] • Lopressor[®] HCT • Lotensin[®] • Minipress[®] • Norvasc[®] • Prinivil[®], Zestril[®] • Vaseretic[®] | <ul style="list-style-type: none"> 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 style="list-style-type: none"> • Advicor[®] • Altacor[®] • Crestor[®] • Lipitor[®] • Mevacor[®] • Niaspan[®] • Pravachol[®] • Pravigard[™] • Vytorin[™] • Zocor[®] | <ul style="list-style-type: none"> Lovastatin + Niacin Lovastatin Rosuvastatin Atorvastatin Lovastatin Niacin Pravastatin Pravastatin + Aspirin Ezetimibe + Simvastatin Simvastatin | Liver damage (all medications); increased flushing and itching (niacin), increased stomach bleeding (pravastatin + aspirin) |
| Infections | <ul style="list-style-type: none"> • Acrodantin[®] • Flagyl[®] • Grisactin[®] • Nizoral[®] • Nydrazid[®] • Seromycin[®] • Tindamax[®] • Zithromax[®] | <ul style="list-style-type: none"> 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) |

Over-the-Counter) That Interact With Alcohol

| Symptoms/ Disorders | Medication (Brand name) | Medication (Generic name) | Some possible reactions with alcohol |
|---|---|---|--|
| Mood stabilizers | <ul style="list-style-type: none"> Depakene[®], Depakote[®] Eskalith[®], Eskalith[®]CR, Lithobid | <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"> Flexeril[®] Soma[®] | <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, motion sickness | <ul style="list-style-type: none"> Antivert[®] Dramamine[®] Phenergan[®] | <p>Meclizine</p> <p>Dimenhydrinate</p> <p>Promethazine</p> | Drowsiness, dizziness; increased risk for overdose |
| Pain (such as muscle ache, minor arthritis pain), fever, inflammation | <ul style="list-style-type: none"> Advil[®] Aleve[®] Excedrin[®] Motrin[®] Tylenol[®] | <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"> Dilantin[®] Horizant[®], Neurontin[®] Keppra[®] Klonopin[®] Lamictal[®] Lyrica[®] Tegretol[®] Topamax[®] Trileptal[®] | <p>Phenytoin</p> <p>Gabapentin</p> <p>Levetiracetam</p> <p>Clonazepam</p> <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/ Disorders | Medication (Brand name) | Medication (Generic name) | Some possible reactions with alcohol |
|---|---|--|---|
| Severe pain from injury, postsurgical care, oral surgery, migraines | <ul style="list-style-type: none"> • Darvocet-N[®] • Demerol[®] • Fiorinal[®] with codeine • Percocet[®] • Vicodin[®] | <ul style="list-style-type: none"> 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 style="list-style-type: none"> • Ambien[®] • Lunesta[™] • Prosom[™] • Restoril[®] • Sominex[®] • Unisom[®] • Herbal preparations (chamomile, valerian, lavender) | <ul style="list-style-type: none"> Zolpidem Eszopiclone Estazolam Temazepam Diphenhydramine Doxylamine | <p>Drowsiness, sleepiness, dizziness; slowed or difficulty breathing; impaired motor control; unusual behavior; memory problems</p> <p>Increased drowsiness</p> |

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/ucml63354.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.

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