

Use this sheet to track your medications, including vitamins, herbal supplement, and other over-the-counter medications. When you visit your doctor, make sure you obtain an updated list of your medications. Please report any side effects or concerns to your physician. Also, review the information about medications to avoid in the elderly and patients with dementia.

[illegible]

Medications Reviewed in 2012 Update

Medications Added with Score of 1:	Medications Added with Score of 2:
Aripiprazole (Abilify™)	Nefopam (Nefogesic™)
Asenapine (Saphris™)	
Cetirizine (Zyrtec™)	Medications Added with Score of 3:
Clidinium (Librax™)	Doxylamine (Unisom™, others)
Desloratadine (Clarinet™)	Fesoterodine (Toviaz™)
Iloperidone (Fanapt™)	Propiverine (Detrunorm™)
Levocetirizine (Xyzal™)	Solifenacin (Vesicare™)
Loratadine (Claritin™)	Tropium (Sanctura™)
Paliperidone (Invega™)	
Venlafaxine (Effexor™)	

Medications Reviewed But NOT Added:
Fexofenadine (Allegra™)
Gabapentin (Neurontin™)
Topiramate (Topamax™)
Levetiracetam (Keppra™)
Tamoxifen (Nolvadex™)
Nizatidine (Axiid™)
Duloxetine (Cymbalta™)

Criteria for Categorization:

Score of 1: Evidence from in vitro data that chemical entity has antagonist activity at muscarinic receptor.

Score of 2: Evidence from literature, prescriber's information, or expert opinion of clinical anticholinergic effect.

Score of 3: Evidence from literature, expert opinion, or prescribers information that medication may cause delirium.

Complete References:

1. Boustani MA, Campbell NL, Munger S, Maidment I, Fox GC. Impact of anticholinergics on the aging brain: a review and practical application. *Aging Health*. 2008;4(3):311-320.
2. Campbell N, Boustani M, Limbil T, et al. The cognitive impact of anticholinergics: a clinical review. *Clinical Interventions in Aging*. 2009;4(1):225-233.
3. Campbell N, Boustani M, Lane K, et al. Use of anticholinergics and the risk of cognitive impairment in an African-American population. *Neurology*. 2010;75:152-159.
4. Fox C, Richardson K, Maidment I, et al. Anticholinergic medication use and cognitive impairment in the older population: the Medical Research Council Cognitive Function and Ageing Study. *Journal of the American Geriatric Society*. 2011; 59(8): 1477-1483.
5. Cai X, Campbell N, Khan B, Callahan C, Boustani M. Long-term anticholinergic use and the aging brain. *Alzheimers Dementia*. 2012; epub ahead of print.

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Use of the Anti-Cholinergic Burden (ACB) Scale may only be in accordance with the Terms of Use for the ACB Scale which are available at <http://www.agingbraincare.org/tools/abc-anticholinergic-cognitive-burden-scale>.

To request permission for use, contact us at acb@agingbraincare.org.

Aging Brain Care

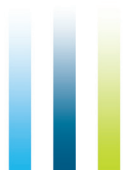
ANTICHOLINERGIC COGNITIVE BURDEN SCALE

2012 Update

Developed by the Aging Brain Program
of the Indiana University Center for
Aging Research



Regenstrief Institute



THE NEW
WISHARD™

ESKENAZI
HEALTH™

Drugs with ACB Score of 1

Generic Name	Brand Name
Alimemazine	Theralen™
Alverine	Spasmonal™
Alprazolam	Xanax™
Aripiprazole	Abilify™
Asenapine	Saphris™
Atenolol	Tenormin™
Bupropion	Wellbutrin™, Zyban™
Captopril	Capoten™
Cetirizine	Zyrtec™
Chlorthalidone	Diuril™, Hygroton™
Cimetidine	Tagamet™
Clidinium	Librax™
Clorazepate	Tranxene™
Codeine	Contin™
Colchicine	Colcrys™
Desloratadine	Clarinex™
Diazepam	Valium™
Digoxin	Lanoxin™
Dipyridamole	Persantine™
Disopyramide	Norpace™
Fentanyl	Duragesic™, Actiq™
Furosemide	Lasix™
Fluvoxamine	Luvox™
Haloperidol	Haldol™
Hydralazine	Apresoline™
Hydrocortisone	Cortef™, Cortaid™
Iloperidone	Fanapt™
Isosorbide	Isordil™, Ismo™
Levocetirizine	Xyzal™
Loperamide	Immodium™, others
Loratadine	Claritin™
Metoprolol	Lopressor™, Toprol™
Morphine	MS Contin™, Avinza™
Nifedipine	Procardia™, Adalat™
Paliperidone	Invega™
Prednisone	Deltasone™, Sterapred™
Quinidine	Quinaglute™
Ranitidine	Zantac™
Risperidone	Risperdal™
Theophylline	Theodur™, Uniphyll™
Trazodone	Desyrel™
Triamterene	Dyrenium™
Venlafaxine	Effexor™
Warfarin	Coumadin™

Drugs with ACB Score of 2

Generic Name	Brand Name
Amantadine	Symmetrel™
Belladonna	Multiple
Carbamazepine	Tegretol™
Cyclobenzaprine	Flexeril™
Cyproheptadine	Periactin™
Loxapine	Loxitane™
Meperidine	Demerol™
Methotrimeprazine	Levoprome™
Molindone	Moban™
Nefopam	Nefogesic™
Oxcarbazepine	Trileptal™
Pimozide	Orap™

Drugs with ACB Score of 3

Generic Name	Brand Name
Amitriptyline	Elavil™
Amoxapine	Asendin™
Atropine	Sal-Tropine™
Benztropine	Cogentin™
Brompheniramine	Dimetapp™
Carbinoxamine	Histex™, Carbihist™
Chlorpheniramine	Chlor-Trimeton™
Chlorpromazine	Thorazine™
Clemastine	Tavist™
Clomipramine	Anafranil™
Clozapine	Clozaril™
Darifenacin	Enablex™
Desipramine	Norpramin™
Dicyclomine	Bentyl™
Dimenhydrinate	Dramamine™, others
Diphenhydramine	Benadryl™, others
Doxepin	Sinequan™
Doxylamine	Unisom™, others
Fesoterodine	Toviaz™
Flavoxate	Urispas™
Hydroxyzine	Atarax™, Vistaril™
Hyoscyamine	Anaspaz™, Levsin™
Imipramine	Tofranil™
Meclizine	Antivert™
Methocarbamol	Robaxin™
Nortriptyline	Pamelor™
Olanzapine	Zyprexa™
Orphenadrine	Norflex™
Oxybutynin	Ditropan™
Paroxetine	Paxil™
Perphenazine	Trilafon™
Promethazine	Phenergan™
Propantheline	Pro-Banthine™
Propiverine	Detrunorm™
Quetiapine	Seroquel™
Scopolamine	Transderm Scop™
Solifenacin	Vesicare™
Thioridazine	Mellaril™
Tolterodine	Detrol™
Trifluoperazine	Stelazine™
Trihexyphenidyl	Artane™
Trimipramine	Surmontil™
Tropium	Sanctura™

Categorical Scoring:

- Possible anticholinergics include those listed with a score of 1; Definite anticholinergics include those listed with a score of 2 or 3

Numerical Scoring:

- Add the score contributed to each selected medication in each scoring category
- Add the number of possible or definite Anticholinergic medications

Notes:

- Each definite anticholinergic may increase the risk of cognitive impairment by 46% over 6 years. ³
- For each on point increase in the ACB total score, a decline in MMSE score of 0.33 points over 2 years has been suggested. ⁴
- Additionally, each one point increase in the ACB total score has been correlated with a 26% increase in the risk of death. ⁴

Aging Brain Care

www.agingbraincare.org

FAST FACTS: What You Need to Know About Antipsychotic Drugs for Persons Living with Dementia

The AHCA/NCAL Quality Initiative



What is an antipsychotic drug?

An **antipsychotic** (an-tie-sy-COT-ick) drug is a medicine that works in the brain, which may help to block certain chemicals that can cause symptoms of psychosis, such as hallucinations or delusions.

- Hallucinations are when a person sees or hears things that are not there.
- Delusions are when a person believes something that isn't true, even after being told.

Some people with some mental illnesses like schizophrenia and bipolar disorder often have these symptoms.

What are common antipsychotics?

- Haldol
- Quetiapine (Seroquel)
- Olanzapine (Zyprexa)
- Aripiprazole (Abilify)
- Risperidone (Risperdal)

Why are these drugs used in people with Dementia?

These drugs can help for some people with dementia who do have psychosis. However, most of the time these drugs are used when a person acts in way that is challenging or disturbing to others, such as

- hitting, yelling, screaming
- refusing care, walking around
- crying, banging, throwing things

Some people think that these drugs may help with these behaviors however; studies show that many of these behaviors in people with dementia are normal reactions to something they find scary, upsetting or uncomfortable. Or, their actions may also be telling us that they need something such as:

- food because they are hungry,
- water or juice to drink because they are thirsty,
- to take a nap because they are tired,
- to go to the bathroom, or
- something to do because they are bored.

In these cases, drugs will not help.

Do these drugs work in people with dementia?

For people with dementia who have hallucinations or delusions, these drugs can help. However, most people with dementia don't have hallucinations or delusions. For many people, these drugs slow them down, making them drowsy or groggy. These drugs don't get to the heart of the reason for the person's actions. Scientific studies show that for only a small number of people with dementia these drugs will help a little bit. Overall, most people do not get better. Of those who get better, it is those with psychosis and hallucination.

What can these drugs NOT do?

These drugs do not help:

- Stop yelling or repeating questions over and over;
- Calm being restless, fidgety or uneasy,
- Stop memory problems;
- Persons do more for themselves;
- Persons interact better with others; or
- Stop inappropriate things being said.

Why am I hearing so much about them?

Recent scientific studies from both universities and government agencies have found:

1. That these drugs are often used too much in people with dementia
2. That these drugs do not work as well as people first believed in people with dementia.

What are the risks?

People with dementia who are given these drugs are more likely to:

- be unsteady when they walk
- fall
- break their bones
- have incontinence ("pee in their pants")
- have a stroke
- die sooner

Because of these dangers, the US Food and Drug Administration (FDA) requires a warning on the label of all antipsychotic drugs. Such "black box" warnings are only required for drugs with serious risks. The warning includes the following:





Warning: Increased Mortality in Elderly Patients with Dementia-Related Psychosis. Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. [Name of Antipsychotic] is not approved for the treatment of patients with dementia-related psychosis

Is it safe to stop these drugs?

Studies in nursing homes show that it is very safe to try stopping these drugs in people who:

- are taking a low dose;
- did not have any actions recently; or
- did not have hallucinations before starting the drugs.

In studies of people already on an antipsychotic drug that was then replaced with a fake pill, doctors and nurses could not tell the difference between who stopped the drug and who took the drug. This shows that stopping these drugs is safe.

Many experts suggest trying a lower dose or stopping these drugs because

- in nursing homes, staff watch to see if there is a reason to keep using these drugs;
- many of the actions these drugs are used for are about unmet needs and cannot be fixed by drugs; and
- about one out of three people will still act in challenging ways, whether the drug is continued or not.

Why do people with dementia behave in ways that can be challenging?

They may have a need they cannot express or be in a situation they don't understand. For example, when it's time to get undressed for bed or a bath, some people with dementia may hit or try to stop their care giver. This can be because they don't understand why someone is taking off their clothes. A person with dementia can't always tell us how they feel. They may get upset when they need to go to the bathroom. They may get angry when they are tired or hungry. Skilled care givers do their best to predict the needs of people with dementia. Sometimes, they can take steps to meet those needs and keep the person from getting upset. Skilled care givers look at what is going on

physically, emotionally, and environmentally that might be causing the person to react.

- Are they cold, hungry, tired, thirsty, or in pain?
- Are they bored; scared, stressed out, upset by too much noise or another person's actions?
- Are they missing their family or friends?
- Do they find a task they are trying to do, like dressing or bathing, too hard?

These kinds of things can all upset a person. However, drugs do not help with these kinds of needs.

What should I do?

If your loved one is already taking these drugs, ask:

- What type of drug is my loved one on?
- What caused the drug to be prescribed?
- How has the care team tried to help solve the problem without drugs?
- What is the plan to decrease or stop the drug?

If your loved one is not currently on an antipsychotic, BEFORE any are prescribed, ask:

- What is causing the drug to be prescribed?
- What has the care team tried to respond to my loved one's challenging behaviors?
- How will they track the behaviors once the drug is started?
- What is the plan to decrease or stop the drug?

How can I help?

Staff will never know all that you know! You can help by providing answers to questions such as:

- How does your family member express themselves when they are scared, angry, anxious, and hungry?
- What, in the past, has comforted them?
- What is their typical daily routine?
- Are there any behaviors that you have found more difficult to respond to than others?
- What have you tried to prevent them?
- Stay involved in your loved ones care and attend care plan meetings.

DISCLAIMER: The AHCA/NCAL quality programs' contents, including their goals and standards, represent some preferred practices, but do not represent minimum standards or expected norms for skilled nursing and/or assisted living providers. As always, the provider is responsible for making clinical decisions and providing care that is best for each individual person.



For more information, visit
qualityinitiative.ahcancal.org



Ten Medications Older Adults Should Avoid or Use with Caution

Because older adults often experience chronic health conditions that require treatment with multiple medications, there is a greater likelihood of experiencing unwanted drug side effects. Older people can also be more sensitive to certain medications. To help you make better informed decisions about your medications, and to lower your chances of overmedication and serious drug reactions, the American Geriatrics Society Foundation for Health in Aging recommends that older people be cautious about using the following types of medications, including some that can be purchased without a prescription (over-the-counter).

- *If you are taking any of these medications, talk to your healthcare provider or pharmacist.*
- *Do not stop taking any medication without first talking to your healthcare provider.*

Medication

Reasons

USE WITH CAUTION

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

Used to reduce pain and inflammation

AVOID long-acting NSAIDs like indomethacin (Indocin) and piroxicam (Feldene).

- Shorter-acting NSAIDs like ibuprofen (Advil, Motrin) and salsalate (Disalcid) are better choices.
- If you take NSAIDs regularly, and have a history of ulcers or are 75 years of age or older, you may need to protect your stomach against bleeding with a prescription medication such as misoprostol (Cytotec) or a proton pump inhibitor such as omeprazole (Prilosec).
- Because of the increased risk of bleeding, don't use NSAIDs together with aspirin, clopidogrel (Plavix), dabigatran (Pradaxa), dipyridamole (Persantine), prasugrel (Effient), ticlopidine (Ticlid), or warfarin (Coumadin).

NSAIDs can increase the risk of indigestion, ulcers, and bleeding in your stomach or colon. They can also increase blood pressure, affect your kidneys, and make heart failure worse.

AVOID digoxin (Lanoxin) in doses greater than 0.125 mg.

- Digoxin is used to treat heart failure and irregular heartbeats.

It can be toxic in older adults and people whose kidneys do not work well.

AVOID Certain Diabetes Drugs

- Glyburide (Diabeta, Micronase) and chlorpropamide (Diabinese)

These can cause severe low blood sugar.

Medication

Reasons

AVOID Muscle Relaxants

- Such as cyclobenzaprine (Flexeril), methocarbamol (Robaxin), and carisoprodol (Soma), and similar medications.

They can leave you feeling groggy and confused, increase your risk of falls, and cause constipation, dry mouth, and problems urinating. Plus, there is little evidence that they work well.

AVOID Certain Medications used for Anxiety and/or Insomnia

- Benzodiazepines, such as diazepam (Valium), alprazolam (Xanax), or chlordiazepoxide (Librium)
- Sleeping pills such as zaleplon (Sonata) and zolpidem (Ambien)

They can increase your risk of falls, as well as cause confusion. Because it takes your body a long time to get rid of these drugs, you could feel groggy and sleepy for a long time.

AVOID Certain Anticholinergic Drugs

- Antidepressants amitriptyline (Elavil) and imipramine (Tofranil)
- Anti-Parkinson drug trihexyphenidyl (Artane)
- Irritable bowel syndrome drug dicyclomine (Bentyl)
- Overactive bladder drug oxybutynin (Ditropan)

They can cause confusion, constipation, problems urinating, blurry vision, and low blood pressure. Men with an enlarged prostate should be particularly cautious.

AVOID the Pain Reliever meperidine (Demerol)

It can increase the risk of seizures and can cause confusion.

AVOID Certain Over-the-Counter Products

- AVOID products that contain the antihistamines diphenhydramine (Benadryl) and chlorpheniramine (AllerChlor, Chlor-Trimeton) (particularly in men with an enlarged prostate).
- AVOID over-the-counter sleep products, like Tylenol PM, which contain diphenhydramine.

Although these medications are sold without a prescription, they are not risk free. They can cause confusion, blurred vision, constipation, problems urinating, and dry mouth.

If you are NOT being treated for psychosis, AVOID using Antipsychotics

- Such as haloperidol (Haldol), risperidone (Risperdal), or quetiapine (Seroquel).

They can increase the risk of stroke or even death. They can also cause tremors and other side effects, as well as increase your risk of falls.

AVOID Estrogen pills and patches

- Typically prescribed for hot flashes and other menopause-related symptoms

They can increase your risk of breast cancer, blood clots, and even dementia.

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DISCLAIMER: This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other healthcare provider. Always consult your healthcare provider about your medications, symptoms, and health problems. April 2012

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