

# Potentially Harmful Drugs in the Elderly

## medication list

PRESCRIPTION DRUGS	THERAPEUTIC CLASS	COMMENTS	BLUE SHIELD <sup>†</sup> FORMULARY ALTERNATIVES
Amitriptyline and Amitriptyline/perphenazine (Elavil, <sup>®</sup> Triavil <sup>®</sup> )	Antidepressant	Strong anticholinergic and sedative effects.	Fluoxetine (Prozac <sup>®</sup> ) ≤ 20mg/day, Citalopram (Celexa <sup>®</sup> ), Paroxetine (Paxil <sup>®</sup> )
Trimethobenzamide (Tigan <sup>®</sup> )	Antiemetic	Low effectiveness and extrapyramidal side effects (EPS).	<b>Short-term use (5 days maximum):</b> Prochlorperazine (Compazine <sup>®</sup> ), Metoclopramide (Reglan <sup>®</sup> ) <b>For use longer than 5 days:</b> Evaluate etiology and consult a specialist, if needed.
Dicyclomine (Bentyl <sup>®</sup> )	Antispasmodic	Minimal efficacy and anticholinergic side effects.	The Pharmacy & Therapeutics Committee concluded from the medical evidence that no efficacious and safe alternatives are available. Non-pharmaceutical therapies are preferred.
Meperidine (Demerol <sup>®</sup> )	Analgesic, narcotic	Not an effective oral analgesic in doses commonly used. May cause central nervous system adverse events including confusion and seizures.	Acetaminophen/ codeine (Tylenol <sup>®</sup> with Codeine), Acetaminophen/ hydrocodone (Vicodin <sup>®</sup> )
Pentazocine (Talwin <sup>®</sup> )	Analgesic, narcotic	More central nervous system (CNS) effects, including delirium and agitation, than other narcotic drugs.	Acetaminophen/ codeine (Tylenol <sup>®</sup> with Codeine), Acetaminophen/ hydrocodone (Vicodin <sup>®</sup> )
Propoxyphene and Propoxyphene/acetaminophen (Darvon, <sup>®</sup> Darvocet <sup>®</sup> )	Analgesic, narcotic	Analgesic properties similar to acetaminophen but with side effects similar to narcotics.	Acetaminophen/ codeine (Tylenol <sup>®</sup> with Codeine), Acetaminophen/ hydrocodone (Vicodin <sup>®</sup> )
NSAIDs: Indomethacin (Indocin <sup>®</sup> ), Oxaprozin (Daypro <sup>®</sup> ), Piroxicam (Feldene <sup>®</sup> ), Ketorolac (Toradol <sup>®</sup> ), Naproxen (Naprosyn <sup>®</sup> )	Non-steroidal anti-inflammatory drug (NSAID)	<b>Indocin<sup>®</sup>:</b> Has the most CNS side effects of all NSAIDs; <b>Toradol<sup>®</sup>:</b> Elderly have significant asymptomatic GI pathologic conditions from ketorolac; <b>Daypro<sup>®</sup>, Feldene<sup>®</sup>, Naprosyn<sup>®</sup>:</b> Have long half lives, increasing risk for side effects.	<b>Lower GI risk NSAIDs:</b> Etodolac (Lodine <sup>®</sup> ), Nabumetone (Relafen <sup>®</sup> ), Salsalate (Disalcid <sup>®</sup> , Salflex <sup>®</sup> )
<b>Long-acting Benzodiazepines:</b> Flurazepam (Dalmane <sup>®</sup> ), Chlordiazepoxide (Librium <sup>®</sup> ), Diazepam (Valium <sup>®</sup> )	Sedative/ hypnotic	These drugs have very long half-lives (often days) in seniors, producing prolonged sedation and risk for falls.	<b>Shorter-acting, low dose benzodiazepines:</b> Temazepam (Restoril <sup>®</sup> ) ≤ 15mg for sleep only, Lorazepam (Ativan <sup>®</sup> ) ≤ 3mg/day, Oxazepam (Serax <sup>®</sup> ) ≤ 60mg/day

## Potentially Harmful Drugs in the Elderly (continued)

PRESCRIPTION DRUGS	THERAPEUTIC CLASS	COMMENTS	BLUE SHIELD <sup>†</sup> FORMULARY ALTERNATIVES
Meprobamate (Equanil, <sup>®</sup> Miltown <sup>®</sup> )	Anxiolytic/sedative	Highly addictive and sedating.	<b>Shorter-acting, low dose benzodiazepines for PRN* use:</b> Temazepam (Restoril <sup>®</sup> ) ≤ 15mg for sleep only, Lorazepam (Ativan <sup>®</sup> ) ≤ 3mg/day, Oxazepam (Serax <sup>®</sup> ) ≤ 60mg/day <b>Long-standing GAD**:</b> Paroxetine (Paxil <sup>®</sup> ), venlafaxine XR (Effexor XR <sup>®</sup> )
Fluoxetine (Prozac <sup>®</sup> ) >20mg/ day	Antidepressant	Long half life carries risk of excess CNS stimulation, agitation and sleep disturbance.	Fluoxetine (Prozac <sup>®</sup> ) ≤ 20mg/day, Citalopram (Celexa <sup>®</sup> ), Paroxetine (Paxil <sup>®</sup> )
Nifedipine immediate release (Procardia, <sup>®</sup> Adalat <sup>®</sup> )	Antihypertensive, antianginal	The manufacturer recommends against chronic use of the immediate release formulation for chronic hypertension, acute hypertensive crisis, acute MI, or acute coronary syndrome. Additional risk for hypotension and constipation.	<b>Long-acting calcium channel blockers:</b> Nifedipine extended release (Adalat CC, <sup>®</sup> Procardia <sup>®</sup> XL), Diltiazem extended release, (Dilacor XR, <sup>®</sup> Cardizem CD <sup>®</sup> ), Verapamil SR (Calan SR, <sup>®</sup> Isoptin SR <sup>®</sup> )
Thioridazine (Mellaril <sup>®</sup> )	Antipsychotic	Greater potential for EPS and CNS side effects.	Olanzapine (Zyprexa <sup>®</sup> ), Risperidone (Risperdal <sup>®</sup> )
Desiccated thyroid (Armour Thyroid <sup>®</sup> )	Thyroid replacement	Cardiac side effects.	Levothyroxine (Unithroid <sup>®</sup> , Levoxyl <sup>®</sup> )
Doxepin (Sinequan <sup>®</sup> )	Antidepressant	Strong anticholinergic and sedating side effects.	Fluoxetine (Prozac <sup>®</sup> ) ≤ 20mg/ day, Citalopram (Celexa <sup>®</sup> ), Paroxetine (Paxil <sup>®</sup> )
Hydroxyzine (Vistaril, <sup>®</sup> Atarax <sup>®</sup> )	Anticholinergic/ Antihistamine	Potent anticholinergic side effects.	OTC loratadine (Claritin, <sup>®</sup> Alavert <sup>®</sup> ) <sup>†</sup>
Promethazine (Phenergan <sup>®</sup> )	Anticholinergic/ Antihistamine	Potent anticholinergic side effects.	<b>Antihistamine:</b> OTC loratadine (Claritin, <sup>®</sup> Alavert <sup>®</sup> ) <sup>†</sup> <b>Antiemetic, short-term use (5 days maximum):</b> Promethazine may be appropriate <b>Antiemetic use longer than 5 days:</b> Evaluate etiology and consult a specialist, if needed.
<b>Muscle relaxants:</b> Carisoprodol (Soma <sup>®</sup> ), Cyclobenzaprine (Flexeril <sup>®</sup> ), Metaxalone (Skelaxin <sup>®</sup> ), Orphenadrine (Norflex <sup>®</sup> ), Chlorzoxazone (Paraflex <sup>®</sup> )	Muscle relaxant	Poorly tolerated by elderly patients since these cause anticholinergic adverse effects, sedation, and weakness. Additionally, their effectiveness at doses tolerated by elderly patients is questionable and likely to cause cognitive impairment.	The Pharmacy & Therapeutics Committee concluded from the medical evidence that no efficacious and safe alternatives are available. Non-pharmaceutical therapies are preferred.

<sup>†</sup> Blue Shield of California covers prescription generic drugs when available; brand names are listed for reference only.

<sup>†</sup> Over-the-counter (OTC) drugs are not covered.

\* PRN is "as needed."

\*\*GAD is "Generalized Anxiety Disorder."

### References:

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For additional information and questions, please call Blue Shield of California's Pharmacy Services at (800) 535-9481.

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