Most Commonly Used Categories of Drugs in the Clinical Setting

Category	**Class**	**Body System Impacted**	**Generic Name**	**Brand Name**	*Most Common Side Effects (italics)* **SEVERE**	**Nursing Considerations and Vital Assessments**
BP Agents	ACE Inhibitors	CV	Captopril Enalapril Lisinopril	Capoten Vasotec Prinivil	*Cough* *hypotension* **angioedema** **agranulocytosis**	*Obtain BP before administering-hold typically if SBP <90 *Change position slowly-especially with elderly to prevent orthostatic changes *Monitor for decreased WBC count, hyperkalemia, liver function, and GFR/creatinine (metabolized by liver-excreted by kidneys)
	Beta blockers	CV	Atenolol Metoprolol Propranolol	Tenormin Lopressor Inderal	*Fatigue, weakness*, **bradycardia, CHF, pulmonary edema**	*Obtain BP and HR before administering-hold typically if SBP <90. HR <60 *Change position slowly-especially with elderly to prevent orthostatic changes *Contraindicated in worsening CHF, bradycardia of heart block…use with caution in diabetes, liver disease
	Calcium Channel Blockers	CV	Amlodipine Diltiazem Nifedipine Verapamil	Norvasc Cardizem Procardia Calan	*Peripheral edema,* **Cardiac arrythmias, CHF**	*Obtain BP and HR before administering-hold typically if SBP <90. HR <60 *Change position slowly-especially with elderly to prevent orthostatic changes *Measure I&O closely and fluid status due to potential for edema *Monitor liver and kidney function (metabolized in liver-excreted by kidneys)

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	Vaso-dilators	CV	Hydralazine Isosorbide Nitroglycerine	Apresoline Isordil Tridil	*Dizziness, headache, hypotension, tachycardia*	*Obtain BP before administering-hold typically if SBP <90 *Tolerance common and serious problem with long acting nitrates. Nitrates lose their effectiveness if transdermal patches remain on continually. Patches must be taken off at night and then reapplied in the morning *Contraindicated if client taking any erectile dysfunction meds as these are a similar nitrate that improves blood circulation to the penis-synergistic effect can cause dramatic hypotension
Cholesterol Binding Agents	Statins	CV	Lovastatin Rosuvastatin Simvastin Atorvastatin	Mevacor Crestor Zocor Lipitor	*Abd. Cramps, constipation, diarrhea, heartburn, rashes* **Rhabdomyolosis**	*Can cause liver injury/damage-watch ALT/AST/alk phos/bili levels closely *Can cause muscle injury/damage. If CPK elevated DC use
Heart Rhythm Stabilizers	Class III Antiarryth.	CV	Amiodarone	Cordorone	*Dizziness, fatigue, malaise, ataxia, bradycardia* **Pulmonary fibrosis**	*Assess for QT prolongation-can lead to VT/VF with IV administration *Assess HR before giving-hold if <60 with IV administration *Can cause pulmonary toxicity with chronic use-assess for crackles, diminished breath sounds, fatigue, pleuritic chest pain *Assess for neurotoxicity (ataxia, muscle weakness, tingling in fingers/toes, tremors) *Assess for signs of thyroid dysfunction (lethargy, weight gain, edema…HYPOTHYROIDISM or tachycardia, weight loss, nervousness-HYPERTHYROIDISM) *Monitor liver labs (AST-ALT-bili) and throid labs (T3-T4)

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	Digitalis	CV	Digoxin	Lanoxin	*Fatigue, bradycardia, anorexia, N&V* **arrythmias**	*Assess apical pulse for 1 minute before giving-hold if <60 *Increases fall risk for elderly-assess closely *Monitor K+, Mg+, Ca+ levels closely-if these are low more likely to become dig. toxic. Elderly also more likely to be dig. toxic *Assess serum levels of digoxin (norm 0.5-2.0 ng/ml) ***Assess for toxicity: abd. pain, anorexia, N&V, bradycardia, visual changes**
Diuretics	Loop	CV	Furosemide	Lasix	*Dehydration, hypovolemia, hypokalemia, hyponatremia, hypomagnesemia*	*Obtain BP before administering-hold typically if SBP <90 *Change position slowly-especially with elderly to prevent orthostatic changes *Monitor sodium and K+ levels closely as well as Mg+, GFR and creatinine *assess for signs of hypokalemia (weakness-fatigue-increased PVC's on cardiac monitor). Potassium is the lyte that will be most quickly depleted in most pts
	K+ sparing		Spironolactone	Aldactone	*Hyperkalemia*	*Aldactone and ACE inhibitors can cause resultant hyperkalemia *If on Aldactone-make sure does not use potassium based salt substitutes or foods rich in K+
	Thiazides		Hydrochlorothiazide	HCTZ	*Hypokalemia*	*Monitor BP, I&O, daily weight and for presence of edema ***If on digoxin, assess closely for signs of dig. toxicity since they are at higher risk of developing because of the K+ depleting effects of the diuretic** Monitor K+, Na+, Mg+, and creatinine levels closely

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Anti-Coagulants	Anti-Coagulant	Blood	Warfarin	Coumadin	**Bleeding (GI) most common**	***Assess for bleeding: tarry black, or maroon stools, nosebleeds, bruising, or hematuria** *Monitor Hgb, INR (therapeutic range is 2-3 for anticoagulation) *Excreted by liver-assess AST/ALT
	Anti-Coagulant		Heparin (IV/SQ) Lovenox (SQ)	Heparin Lovenox	*Anemia, thrombocytopenia* **Bleeding**	* **Assess for bleeding: tarry black, or maroon stools, nosebleeds, bruising, or hematuria** *Administer SQ in abd, NOT proximal to umbilicus *Pinch abd. fold before/during administration *Assess for decreased platelets (heparin induced thrombocytopenia-HIT)
Analgesic	Narcotics	CNS	Hydromorphone Morphine Oxycodone Codeine	Dilaudid MS Contin Oxycontin Codeine	*Confusion, sedation, hypotension, constipation* **Resp. Depression**	*Assess BP-HR-RR and LOC closely after giving-especially when drug is peaking (this will vary on drug and if given po vs. IV-check your drug book!) *Elderly more sensitive to effects of opiod analgesics and develop SE and resp. complications more frequently *THEREFORE always give LOW range if ordered *Assess bowel function closely due to risk of constipation…determine LBM! *Tolerance develops with long-term use-will need higher doses to achieve adequate pain relief
	Combo	CNS	oxycodone-acetaminophen hydrocodone-acetaminophen codeine-acetaminophen	Percocet Vicodin Tylenol #3	*Confusion, sedation, hypotension, constipation* **Resp. Depression**	*Assess pain relief 1 hour (PEAK) after giving po *Assess BP-HR-R and LOC closely after giving-especially when drug is peaking. *Elderly more sensitive to effects of opiod analgesics and develop SE and resp. complications more frequently *THEREFORE always give LOW range if ordered *Assess bowel function closely due to risk of constipation…determine LBM! *Tolerance develops with long-term use-will need higher doses to achieve adequate pain relief

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	Non-narcotic	CNS	Acetaminophen Aspirin	Tylenol ASA	**Liver failure, toxicity w/OD or high doses**	*Max. daily dose is 4000 mg. Liver damage can result if reaches this level or is malnourished or abuse of ETOH more likely to be toxic *Monitor liver labs (AST-ALT-bili-PT/INR) with Tylenol & Aspirin *Give Aspirin w/food to minimize risk of ulcer/GI bleed
	Non-steroidal anti-inflammatory (NSAID)	CNS	Ibuprofen Indomethacin Naproxsyn Ketorolac	Motrin/ Advil Indocin Aleve Toradol	*Headache, constipation, N&V* **GI Bleeding, Hepatitis**	*Give w/food to minimize risk of ulcer/GI bleed *Assess for GI bleeding: tarry black, or maroon stools, lightheaded, tachycardia *Elderly are at higher risk to develop GI bleeding *Monitor liver labs (AST-ALT-bili-PT/INR) *Assess response to pain med 1 hour after giving *Increases bleeding times. Be sure to DC before surgery. Effects last 24 hours after last dose
Anti-anxiety	Anti-anxiety	CNS	Alprazolam Diazepam Lorazepam	Xanax Valium Ativan	*Dizziness, drowsiness, lethargy*	*Assess closely for dizziness, drowsiness with first doses *CNS side effects increase w/elderly. THEREFORE always give LOW range if ordered
Anti-convulsant	Anti-convulsant	CNS	Carbamazepine Gabapentin Levetiracetam Phenytoin	Tegretol Neurontin Keppra Dilantin	*Drowsiness, ataxia, weakness*	*Neurontin commonly used for neuropathic pain or chronic pain syndromes
Anti-depressant	Selective Serotonin Reuptake Inhibitors (SSRI)	CNS	Citalopram Fluoxetine Paroxetine	Celexa Prozac Paxil	*Drowsiness, headache, insomnia, nervousness, tremor*	*Requires 2 weeks to have physiologic effects when new medication *Assess for increased suicidal tendencies with new therapy
Anti-Parkinson		CNS	Carbidopa-Levodopa	Sinemet	*N&V, involuntary movements*	*OK to give w/food to minimize GI side effects *Assess for Parkinson's effects improving: rigidity, tremors, shuffling gait, drooling

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	Anti-psychotic	CNS	Quetiapine Haloperidol	Seroquel Haldol	*Constipation, dry mouth, blurred vision, extrapyramidal reactions (EPSE)*	*OK to give w/food to minimize GI irritation *Assess mental status (mood-orientation-behavior) before and after giving *Expected effect is DECREASED agitation/restlessness if given prn *Monitor for increased restlessness-agitation after first dose. This is a side effect *Monitor for EPSE-these are Parkinson like: difficulty/speaking or swallowing, loss of balance, pill rolling, rigidity, shuffling gait and tremors *Monitor for dystonic reaction: muscle spasm, especially in neck causing head to stay fixed on affected side, weakness of extremities
Gastric Acid Reducers	Proton Pump Inhibitors (PPI)	GI	Pantoprazole Omeprazole	Protonix Prilosec	*Abdominal pain*	*May give w/without regards to food *Assess frequently for epigastric/abd pain and blood in stool, emesis
	Histamine Blockers (H2)	GI	Cimetadine Famotidine Ranitidine	Tagamet Pepcid Zantec	*Confusion,* **Arrythmias**	*Administer w/food to prolong effects *Assess frequently for epigastric/abd pain and blood in stool, emesis. Given to prevent ulcers. This would be indicative of GI bleeding
Anti-Nausea		GI	Ondansetron Prochlorperazine Promethazine	Zofran Compazine Phenergan	*Headache, constipation, diarrhea, extrapyramidal reactions (Compazine only)*	*With prochlorperazine (Compazine) monitor for sedation and dystonic reaction: muscle spasm, especially in neck causing head to stay fixed on affected side, weakness of extremities *May develop EPSE w/prochlorperazine. Assess for difficulty/speaking or swallowing, loss of balance, pill rolling, rigidity, shuffling gait and tremors
Laxatives		GI	Docusate Sennosides Psyllium	Colace Senokot Metamucil	*Abd cramps, diarrhea*	* Assess GI system carefully for abd distention, presence of bowel sounds, and color, consistency and amount of stool *Hold if has recent pattern of loose stools

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	Bronchial dilators	Resp.	Albuterol Albuterol-ipatropium	Ventolin Combivent	*Nervousness, restlessness, tremor, chest pain, palpitations*	*Assess breath sounds, pulse and BP before and after giving. Note amount, color and character of any sputum *Inhaled albuterol onsets in 5-15" and peaks in 1 hour *Assess therapeutic benefit of neb in 15"
	Bronch. Dilator & Steroid Combo	Resp.	Fluticasone-salmeterol	Advair	*Headache, nervousness*	*Assess breath sounds before and after giving. Note amount, color and character of any sputum *Because it is a maintenance combination, will not likely see any changes after administration *Rinse mouth with water after use to prevent thrush
	Inhaled Steroids	Resp.	Triamcinalone Fluticasone	Azmacort Flovent	*Headache, pharyngitis, flu like symptoms*	*Monitor resp. status and breath sounds closely *May cause increased serum and urine glucose levels due to steroid effect-monitor as needed
Anti-Infectives	Anti-fungal	Systemic	Fluconazole Nystatin	Diflucan Mycostatin	**Liver toxicity**	*Obtain any specimen cultures before giving first dose *Excreted by kidneys so monitor renal function (creatinine) closely
	Cephalosporin	Systemic	Cephalexin	Keflex	*Diarrhea* **Colitis, seizures**	*Obtain any specimen cultures before giving first dose *Can give w/wo food *Assess for allergic response of any kind (rash-itching-hives-anaphylactic-resp. distress) *Determine if has allergy to penicillin, give w/caution as there is risk for cross sensitivity to penicillin *Continue to assess for response to infection (temp-appearance of wound-WBC/neutrophils)
	Penicillins	Systemic	Amoxicillin Ampicillin	Amoxil Polycillin	*Rashes, diarrhea* **Seizures, allergic reactions, colitis**	*obtain any specimen cultures before giving first dose but do need results *can give w/wo food *assess for allergic response of any kind (rash-itching-hives-anaphylactic-resp. distress) *determine if has allergy to cephalosporins, give w/caution as there is risk for cross sensitivity to cephalosporins *continue to assess for response to infection

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	Sulfonamides	Systemic	Sulfamethoxazole & trimethoprim	Bactrim	*Epigastric pain, N&V, itching, rash*	*Obtain any specimen cultures before giving first dose *Give on empty stomach with full glass of water *Primarily used for urinary tract infection-assess response (fever-ongoing painful/burning urination) *Assess for allergic response of any kind (rash-itching-hives-anaphylactic-resp. distress)
	Tetracyclines	Systemic	Doxycycline Tetracycline	Doxy Tetracyn	*Diarrhea, N&V, light sensitivity*	*Obtain any specimen cultures before giving first dose *Give on empty stomach with full glass of water *Assess for allergic response of any kind (rash-itching-hives-anaphylactic-resp. distress)
Steroids		Systemic	Dexamethasone Hydrocortisone Prednisone	Decadron Solu-cortef Deltasone	*Depression, hypertension, anorexia, nausea, bruising*	*Give orally w/meals to avoid GI irritation *Causes hyperglycemia-monitor glucose levels closely especially if diabetic *Decreases immune response and WBC count: assess closely for signs of infection *Decreases serum K+ levels and increases Na+. Monitor these labs closely *Assess for signs of adrenal insufficiency that can cause hypotension, weight loss, weakness, N&V, confusion, peripheral edema *Monitor I&O and daily weights for these reasons
Thyroid Hormone		Systemic	Levothyroxine	Synthroid	*Usually seen only when excessive doses cause hyperthyroid symptoms*	*give on empty stomach in the morning *assess apical pulse and BP prior to giving periodically *monitor thyroid function tests (T3-T4-TSH)
Muscle-skeletal Agents	Arthritis	Joints	Leflunomide	Cerebrex	*Dizziness, drowsiness, rash, ataxia*	*assess range of motion and degree of swelling and pain in affected joint
	Gout			Alloprim Colchicine	*Rash-Allopurinol* *Diarrhea, N&V-colchicine*	*give with meals to minimize gastric irritation *monitor for joint pain and swelling

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	Muscle relaxants	Muscle	Cyclobenzaprine methocarbamol	Flexeril Robaxin	*Dizziness, drowsiness, dry mouth,*	*Assess for pain, muscle stiffness and range of motion before and periodically throughout therapy *Monitor elderly closely for increased sedation and weakness *Administer with caution in combination w/narcotics due to increased sedation with any age
	Electrolyte replacement	Systemic	Potassium Chloride	K-dur	*Abd. Pain, N&V, diarrhea* **Arrythmias (PVC's or V-Tach)**	*Administer w/meals-is very hard on stomach! *Monitor serum K+ closely throughout therapy *Assess for signs of hypokalemia (weakness-fatigue-increased PVC's on cardiac monitor) *Assess for signs of hyperkalemia (bradycardia-fatigue-muscle weakness-confusion)

References

1. Vallerand, A.H., Sanoski, C.A., & Deglin, J.H. (2013) *Davis's drug guide for nurses.* Thirteenth ed. Philadelphia, PA: F.A. Davis Company