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| **Class: Non-Opioid Analgesic & Anti-Pyretic** | | | | |
| **Generic Name:** [acetaminophen](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=c26f1872-ebff-4164-bf64-4272df43a2db)  **Prototypes/Brand Name:** Tylenol, Panadol  **Mechanism:** Reduces fever by acting directly on hypothalamic heat-regulating center. Analgesic mechanism unclear. Not an anti-inflammatory agent | | | **Therapeutic Effects:**   * Antipyretic: Reduction in fever * Analgesic: Reduction in pain | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | **Nursing Considerations** |
| * Can be given orally or rectally * Assess pain prior to and after administration * Administer with a full glass of water * Maximum dose over 24-hour period:   + 4000 mg adults,   + 3200 mg geriatric   + 2000 mg clients with chronic alcoholism | * Arthritis and rheumatic disorders involving musculoskeletal pain * Common cold, flu, other viral and bacterial infections with pain and fever | * Allergy to acetaminophen. * Use cautiously with impaired hepatic function, chronic alcoholism, pregnancy, lactation. | * Skin reddening * Hypersensitivity: Rash, fever * Hepatotoxicity (liver damage) * Renal damage   **SAFETY:** Do not exceed recommended dose. Report rash, bleeding, or yellowing of skin. If overdose, monitor serum levels. Antidote is acetylcysteine | * Assess history and physical condition related to liver and kidneys * Avoid using multiple preparations with acetaminophen |

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| **Class: NSAID & Antiplatelet** | | | | | |
| **Generic Name:** [acetylsalicylic acid](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=baf5a1ba-14a7-4e0d-ba0c-a34c4befd8ae)  **Prototype/Brand name:** aspirin  **Mechanism:**  Inhibits the synthesis of prostaglandins. Inhibition of platelet aggregation. | | | **Therapeutic Effects:**   * Treatment of mild pain and fever * Reduces the risk of heart attack and stroke | | |
| **Administration** | **Indications** | **Contraindications** | | **Side Effects** | **Nursing Considerations** |
| * Given orally * Assess pain before and after * Not for children under 12 * Take with a full glass of water and food. Sit upright for 15-30 min * Do not crush, chew, break, or open an EC pill. Swallow whole * chewable must be chewed * Stop 7 days prior to surgery | * Mild to moderate pain * Fever * rheumatic fever, rheumatoid arthritis, osteoarthritis * Reduced risk of recurrent stroke in males. * MI prophylaxis | * Allergy to salicylates, NSAIDs * Conditions that increase risk of bleeding, or clotting deficiencies. * Caution with impaired renal * Surgery scheduled within 1 wk * Pregnancy & breastfeeding   **Do not use in children/ teens for chickenpox or flu symptoms without review for Reye’s syndrome.** | | * *Acute aspirin toxicity:* **hemorrhage, seizures, tetany, CV, renal and respiratory failure** * *Aspirin intolerance:* bronchospasm, rhinitis * Nausea, hepatotoxicity * Blood loss * Hypersensitivity * Salicylism (Dizzy, tinnitus)   **SAFETY:** Emergency procedures if overdose (i.e., Gastric lavage, activated charcoal, etc.) | * Assess history, allergies, and physical condition related to liver, kidneys, hemostasis, viral infection, pregnancy, and lactation * Keep out of the reach of children * Report ringing in the ears; dizziness, confusion; abdominal pain; rapid or difficult breathing; nausea, vomiting, bloody stools. |

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| **Classification: Non-Steroidal Anti-Inflammatory Drug (NSAID)** | | | | | |
| **Generic Name (Prototype/Brand Name):**  [ibuprofen](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=e914472b-c785-4c73-b37c-4d459166cf41) (Motrin, Advil)  [ketorolac](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=0c2c75c9-ed7b-46a8-9543-429bf2d8f090) (Toradol)  [celecoxib](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=457eb10a-1188-4c43-a147-d258517342e8) (Celebrex)  **Mechanism:** Anti-inflammatory and analgesic effects without the adverse effects associated with corticosteroids. Inhibition of prostaglandin synthesis. Blocks cyclooxygenase (COX) 1 and 2. | | | | **Therapeutic Effects:**   * Treatment of mild pain and fever * Decreases pain and inflammation caused by arthritis or spondylitis | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | | **Nursing Considerations** |
| * PO or IV/IM (ketorolac) * Assess pain before and after * Take with food or milk if upset stomach * Stay well hydrated   Absorption: GI  Metabolism: Liver  Excretion: Kidneys | * Pain and inflammation related to arthritis * Mild to moderate pain * Pain from primary dysmenorrhea * Fever reduction | * Allergy to NSAIDs or salicylate; or sulfonamides **(celecoxib)** * CV, renal, or liver dysfunction. * Peptic ulcer or known GI bleed * Thrombotic events * Pregnancy or lactation.   *Drug-drug interactions:*   * Loop diuretics * Beta-blockers * Lithium toxicity (ibuprofen) * anticoagulants * ethanol ingestion | * CNS: headache, dizziness, fatigue * CV: HTN, **CVS events,** heart failure, edema **(Celecoxib)** * GI: nausea, dyspepsia, GI pain, constipation, diarrhea, * Hema: bleeding (GI, gums), platelet inhibition, * Steven Johnson syndrome * **Ketorolac:** Abnormal taste   **SAFETY:** If overdose, implement gastric lavage. | | * Assess for allergies, S&S of GI bleed, skin rash, renal function, Liver function. * Use drug only as suggested; avoid overdose. * Report sore throat, fever, rash, itching, weight gain, swelling in ankles or fingers, changes in vision, black or tarry stools. |

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| **Class: Opioid Analgesic** | | | | | |
| **Generic Name (Prototype/Brand Name):**  [morphine sulfate](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=2da87bfa-11fd-43e3-8fef-d16ebeb15680) (M-ESlon, MS Contin)  [hydromorphone](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=c4a6f07e-f242-4d25-be44-743b185783a1) (Dilaudid)  [fentanyl](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=38d0c14a-a0c1-44cc-a939-0304eb8037d6) (Duragesic)  **Mechanism:** Binds to opioid receptors in the CNS and alters the perception of and response to painful stimuli while producing generalized CNS depression. | | | | **Therapeutic Effects:**   * Treatment of moderate to severe pain * Suppression of cough or respiratory distress | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | | **Nursing Considerations** |
| * IR and SR oral preparations * IV, SC, IM, rectal, epidural, or transdermal. * Used in all ages. * Caution in pregnant and breastfeeding women, liver and renal impairment, and elderly clients. * If nausea, take with food and lay quietly | * Relief of moderate to severe acute and chronic pain * Analgesic during anesthesia * Pulmonary edema * Cancer pain and pain at end of life because there is no “ceiling effect,” | * Acute pancreatitis * Renal impairment * Liver impairment * Respiratory depression * Paralytic ileus * Obstructive airway disease * Increased intracranial pressure * Acute alcoholism | * CNS depression (respiratory, CVS, sedation, N/V, sweating) respiratory depression * Sweating, Pruritis * **Potentially Fatal: Respiratory depression; circulatory failure; hypotension; deepening coma; anaphylactic reactions.**   **SAFETY** Assess resp and sedation, naloxone for reversal. Consider a bowel regime for risk of constipation. | | * Assess for allergies, S&S of respiratory & CNS depression, GI obstruction, head injury etc. * Do not perform hazardous activities * No other CNS depressants. * Do not cut, crush, or chew controlled release * Dilute and administer IV slowly |

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| **Class: Opioid Antagonist** | | | | | |
| **Generic Name:** [naloxone](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=b1303f15-c48b-a44d-b28a-72f370094e02)  **Prototype/Brand Name:** Narcan  **Mechanism:** competes with opioid receptor sites in the brain and, thereby, prevents binding with receptors or displaces opioids already occupying receptor sites. | | | | **Therapeutic Effects:**  Reversal of analgesia and CNS and respiratory depression caused by opioid agonists. | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | | **Nursing Considerations** |
| * Safety and effectiveness have not been established in children. * Caution for pregnant and lactating women * repeated doses PRN * *IV onset:* 2 mins * *IM onset:* 3-5 mins * *Metabolism:* Liver * *Excretion:* Kidney (urine) | * complete or partial reversal of opioid effects | * **Allergy to narcotic antagonists.** * **Pregnancy, lactation.** * **Narcotic addiction.** * **CV disease.** | * CNS: agitation, reversal of analgesia * CV: tachycardia, blood pressure changes, dysrhythmias, pulmonary edema * Acute narcotic abstinence syndrome     **SAFETY:** I**f providing naloxone for an overdose consider CPR as needed to support the client.** | | * Assess for allergies, and S&S of MI * Conduct baseline pain assessment * Excessive doses in postop clients may result in **significant reversal of analgesia** and **may cause cardiovascular events** * Provide comfort measures to help client cope with pain |

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| **Class: Adjuvant Analgesic** | | | | | |
| **Generic Name:** [baclofen](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=346af8fe-3816-49de-bfd3-5a7425e728f9)  **Prototype/Brand Name:** APO-Baclofen  **Mechanism:** inhibits reflexes at the spinal level. | | | | **Therapeutic Effects:**   * Inhibition of spasticity and muscle stiffness * Reduction of pain | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | | **Nursing Considerations** |
| * Baclofen is safe for clients 12 years and older. * Do not take this drug during pregnancy. * PO and intrathecal routes * Excretion: Kidneys | * Muscle symptoms (such as spasm, pain, and stiffness, caused by multiple sclerosis, spinal cord injuries, or other spinal cord disorders). | * Hypersensitivity. Active peptic ulcer disease. * Caution for use with renal impairment. | * Drowsiness, dizziness or light-headedness, confusion, nausea, constipation, sedation, and muscle weakness. * Potentially Fatal: Respiratory or CV depression, seizures.   **SAFETY WARNING:** **Abrupt discontinuation can cause serious reactions.** | | * Assess for allergies, and S&S of MI * Avoid abrupt withdrawal * Avoid use with alcohol or other CNS depressants. * Report frequent or painful urination, constipation, nausea, headache, insomnia, or confusion that persists or is severe. |

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| **Class: Adjuvant Analgesic** | | | | |
| **Generic Name:** [cyclobenzaprine](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=b12fb4ea-182e-462b-b6ed-cfd2f6bb71e8)  **Prototype/Brand Name:** Flexeril, Novo-Cycloprine  **Mechanism:** reduces tonic somatic muscle activity at the level of the brainstem. It is structurally like tricyclic antidepressants. Precise mechanism not known | | | **Therapeutic Effects:**   * Reduction of pain and muscle spasms | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | **Nursing Considerations** |
| * Use cautiously with geriatric clients, and those who take antidepressants and other CNS depressants. * Safety and efficacy in clients under 15 years are not established. * Caution with urinary retention, glaucoma, lactation, mild hepatic impairment | * Used to treat acute muscle spasms. | * Hypersensitivity to cyclobenzaprine * Acute recovery phase of MI, arrhythmias, heart block or conduction disturbances, CHF * Hyperthyroidism.   . | * Antimuscarinic effects, neurological adverse effects, GI disorders, orthostatic hypotension, tachycardia, hypersensitivity reactions. * Increased appetite/wt. gain * Increased sedation with other CNS depressants * Serotonin Syndrome   **SAFETY:** Orthostatic hypotension. | * Assess for allergies, and S&S of CV disease * Inform clients about serious side effects * Avoid concurrent use with alcohol or other CNS depressants. * Report urinary retention or difficulty voiding, pale stools, yellow skin, or eyes. |

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| **Class: Antigout** | | | | | |
| **Generic Name:** [allopurinol](https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=a80fe56f-8d03-423f-8e2a-7ec8c9e5045b)  **Prototype/Brand Name:** Purinol  **Mechanism:** blocks production of uric acid by inhibiting the action of xanthine oxidase | | | | **Therapeutic Effects:**   * Prophylaxis or treatment of gout * Urine alkalinity | |
| **Administration** | **Indications** | **Contraindications** | **Side Effects** | | **Nursing Considerations** |
| * Safe for all ages * Reduce dose for renal impairment * drink 2.5 to 3 L/day to decrease the risk of renal stone development. * Take after meals. | * Treatment of gouty arthritis and nephropathy * Treatment of secondary hyperuricemia. | * Allergy to allopurinol, blood dyscrasias. * Use cautiously with liver disease, renal failure, lactation, pregnancy | * Hypotension, flushing, hypertension, drowsiness, nausea and vomiting, diarrhea, **hepatitis, renal failure**, or a drug rash with eosinophilia and **systemic symptoms (DRESS) syndrome** or drug hypersensitivity syndrome.   **SAFETY:** Discontinue drug at first sign of skin rash | | * Assess for allergies, and S&S of hyperuremia * Take as directed. * Reduce alcohol consumption. * Regular blood tests. * Alkaline diet and increased fluid - prevent kidney stone * Report unusual bleeding, bruising, or rash to a health care provider immediately. |