|  |
| --- |
| **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
 |

|  |
| --- |
| **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.
 |

|  |
| --- |
| **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.
 |

|  |
| --- |
| **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
 |

|  |
| --- |
| **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
 |

|  |
| --- |
| **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.
 |

|  |
| --- |
| **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.
 |

|  |
| --- |
| **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.
 |