NSAIDS can predispose to photo-toxic effects of the sun in sensitive individuals.

**acetaimophen [Tylenol®]**

\[ \text{ät'set'ë'mi'nöf'in [tī'le-nəw'l]}

**Availability:** tablet: 325 mg acetaminophen (OTC)

**Action:** analgesic (‡ of pain threshold), antipyretic (resets hypothalamic heat-regulating center), ↑ sweating, dilation of blood vessels, not a platelet inhibitor, not anti-inflammatory

**Indications:** minor aches, pains, headaches, fever

**Contraindications:** liver disease, previous max therapeutic dose within 4 hrs.

**Precautions:** OD (> 10 g adult; > 140 mg/kg child) may cause hepatic toxicity. Early symptoms: N/V, diaphoresis, malaise. For pain do not take for more than 10 days (adult) 5 days (child). For fever do not take for more than 3 days.

**Side Effects:** allergic reactions, hypoglycemia, jaundice

**Interactions:** alcohol, anticoagulants, oral contraceptives, diflunisal, metoclopramide, chloramphenicol

**Dose:**
- Pediatric Dose: 10-15 mg/kg PO; q 4h, PRN
- Dog Dose: 25-30 mg/kg PO; q 6h, PRN

**aspirin (acetylsalicylic acid) [Bufferin®] (buffered) [Ecotrin®] (enteric coated)**

\[ \text{ä'sëpr'in (ä'së'säl'sil'ik)} \]

**Availability:** tablet: 325 mg aspirin; adult chewable (children's) aspirin: 80 mg aspirin (OTC) in either buffered or enteric coated formulation

**Action:** inhibits prostaglandin synthesis of platelets, analgesic, antipyretic, anti-inflammatory

**Indications:** minor aches, pains, headaches, fever, arthritis, MI (prophylaxis), sunburn (+2 hr before exposure), Disseminated Intravascular Coagulation (DIC)

**Contraindications:** children < 6 y c chicken pox or flu symptoms (Reye syndrome), last trimester of pregnancy, allergy to aspirin, asthma, gastric ulcers, suspected bleeding, renal insufficiency

**Precautions:** not c prescription drugs (NSAIDs) for: arthritis, anticoagulants, gout (OK unless on other NSAIDS), diabetes (renal insufficiency)

**Side Effects:** gastritis(5%), heartburn(12%), N/V (8%), tinnitus and hyperthermia (signs of OD), ↑ BP

**Interactions:** potentiates other analgesics (NSAIDs), anticoagulants, antacids may ↑ clearance

**Dose:**
- antiplatelet (low): 80-325 mg SL, PO; q 24 hr, PRN
- analgesic, antipyretic (intermediate): 325-650 mg PO; q 4 hr, PRN
- anti-inflammatory (high): 4-8 g/day
- anti-inflammatoriy: 150-300 mg/20 kg PO q 24-48 h for 10 days

**Pediatric Dose:**
- (6-12 y) 160 mg PO; q.i.d., PRN

**Dog Dose:**
- antiplatelet: 0.5 mg/kg PO; b.i.d., PRN; analgesic: 10-20 mg/kg PO q 12 h, PRN
- antipyretic: 10 mg/kg PO; b.i.d., PRN; DIC: 150-300 mg/20kg PO q 24-48 h for 10 days
- anti-inflammatory: 40 mg/kg PO; q 8 h

**Horse Dose:**
- analgesic: 25 mg/kg PO q 12 h (one time), then 10 mg/kg PO q 24h

**ibuprofen [Advil®, Nuprin®, Motrin®]**

\[ \text{i'bi'pro'fen [ad'vil, nuprin, motrin]} \]

**Availability:** tablet: 200 mg ibuprofen (OTC), 400, 600, 800 mg ibuprofen (R)

**Action:** inhibit PG synthesis of platelets, analgesic, antipyretic, anti-inflammatory

**Indications:** minor to moderate aches, pains, headaches, fever, primary dysmenorrhea, pain following dental extraction, arthritis, sunburn

**Contraindications:** pregnancy, allergy to aspirin, gastric ulcers, bleeding, diabetes c renal insufficiency
Precautions: not c prescription NSAIDs, blurred/diminished vision, scotomata (blind spot), changes in color vision, fluid retention, edema, aseptic meningitis, may promote asthma attack. For pain do not take for more than 10 days (adult) 5 days (child).

Side Effects: For fever do not take for more than 3 days.

Interactions: potentates other analgesics, anticoagulants

Dose: arthritus: 600 mg PO q.i.d., 800 mg PO t.i.d.
mild to moderate pain, dysmenorrhea: 400 mg PO; q 4 h, PRN

Pediatric Dose: (>12 y) 10 mg/kg PO; q 4-6 h, PRN

Note: Cannot be used on the dog because it causes repeated and consistent vomiting even with used in enteric-coated formulations.

ketorolac tromethamine [Toradol® B]

Availability: injection: 60 mg in 2 ml of NaCl (also 10% w/v alcohol)

Action: inhibit PG synthesis of platelets, analgesic, antipyretic, anti-inflammatory

Indications: major pain (short term management), pain following trauma

Contraindications: pregnancy, labor and delivery, diabetics c renal insufficiency, GI bleed, EtoH-ism

Precautions: c other NSAIDs, may promote asthma attack, do not use for > 7 days

Side Effects: may prolong bleeding time, edema (3-9%), nausea (12%), GI disorder (3-9%), drowsiness (3-8%), dizziness (3-8%), H/A (17%), diaphoresis (3%), constipation (3%), dyspepsia (12%), insomnia (14%), nervousness (6%), pruritis (3-9%), dry mouth (9%)

Interactions: aspirin (↓ protein binding, use lower dose)

Dose: (lower end dose for pt < 50 kg, > 65 y, c renal function)
30-60 mg IM initially, then 15-30 mg IM, IV; q 6h, PRN

acetaminophen c hydrocodone bitartrate [Vicodin® B, Lortabs® B, Anexia® B]

Availability: tablet: 500 mg acetaminophen, & 5 mg hydrocodone bitartrate

Action: hydrocodone: opioid analgesic, antitussive; acetaminophen: analgesic, antipyretic

Indications: moderate to moderately severe pain, canine upper respiratory infection (kennel cough)

Contraindications: hypersensitivity to components

Precautions: c head injuries, c acute abdominal conditions (???, c hepatic & renal function

Side Effects: allergic reaction to sulfite, ↑ICP, ↓LOC, ↓respirations, N/V, light headedness, less constipating and more sedating than codeine, dries respiratory mucosa

Interactions: potentates other narcotics, alcohol, atropine (paralytic ileus), scopolamine HCl (paralytic ileus)

Dose: i-ii tablets PO q 4-6h, PRN

Dog Dose: i tablet/22 kg PO q 4-12h, PRN (0.22 mg/kg hydrocodone PO b.i.d.-t.i.d.)

morphine sulfate B

Availability: ampul or Tubex®/tūˈbeks/ (25 G x 1¼": 10 mg in 1 mL

Action: ↓CNS, ↓pain (max analgesic 60 min p admin ???), peripheral vasodilation

Indications: moderate to moderately severe pain, pulmonary edema

Contraindications: hypersensitivity, undiagnosed abdominal pain, respiratory insufficiency or depression, CNS depression, bronchial asthma attack, head injury, ↑intracranial pressure, hypovolemia

Precautions: hypotension, ↓respirations (have naloxone available)

Side Effects: ↓LOC, itching, N/V (Tx c antihistamines), urinary retention ( 90%), constipation (drink fluids), drowsiness (titrate dosage to tolerable pain level), myosis

Side Effects Dog: ↓CNS, emetic, antitussive, myosis, may cause hypothermia, initially stimulates respirations, causes coronary vasoconstriction, will immediately defeate following injecton

Side Effects Horse: ↑CNS, may cause hyperthermia, may cause mild colic

DRAFT: 5 September 1994
Interactions: not MAO inhibitors, potentated by alkalizing agents, antihistamines, alcohol, and other narcotics, antagonized by acidifying agents.

Dose: IV: 2-5 mg, then 2 mg q few min until ↓ pain or respiratory depression (max 10-30 mg in 4 h)
IM: 5-15 mg based on pt weight

Pediatric Dose: 0.1-0.2 mg/kg IV
Dog Dose: analgesia: 0.5-1.0 mg/kg IV, IM, SQ; PRN
Horse Dose: analgesia: 0.22 mg/kg IM, slow IV; PRN

naloxone hydrochloride [Narcan® B]
nal•oks•'on
Availability: ampul or prefilled syringe: 2.0 ml of 1.0 mg/ml
Action: opioid antagonist, reverses effects of narcotics short term
Indications: narcotic or synthetic analgesic OD, rule out narcotic in coma of unknown origin
Contraindications: hypersensitivity
Precautions: caution c narcotic dependency (cause withdrawal effects), short acting
Side Effects: incidence low
Dose: 1-2 mg IV, IM, ET
Pediatric Dose: 0.01-0.1 mg/kg IV, IM, ET
Dog Dose: 0.02-0.04 mg/kg IV, IM, & SQ
Horse Dose: 0.01-0.02 mg/kg IV

phenazopyridine hydrochloride [Pyridium® B]
fên•ä•zö•pêr•i•dên hi•drô•klo'rid [py'rî'dî'üm]
Availability: tablet: 100 mg phenazopyridine hydrochloride
Action: urinary tract analgesic
Indications: pain, burning, urgency, frequency arising from irritation of the lower UT caused by infection, trauma, passage of catheters
Contraindications: hypersensitivity to drug, renal insufficiency
Precautions: do not use for more than 2 days while treating UTI c antibacterials, discontinue c jaundice
Side Effects: red or orange coloured urine, H/A, rash, itching, GI disturbance
Dose: 200 mg t.i.d. p.c.

oil of cloves [Eugenol®]
[u'jen•ol]
Availability: 10 mL bottle (OTC)
Action: short acting topical dental analgesic
Indications: tooth ache
Precautions: temporary measure only
Dose: apply to effected tooth PRN

Tranquilizers

haloperidol [Haldol® B]
halb•êr•i•dôl [hal'dawl]
Availability: ampul or prefilled syringe: 1.0 mL of 5.0 mg/mL, tablet: 5 mg
Action: tranquilizer (mechanism unknown)
Indications: psychotic disorders (e.g. schizophrenia), behavioral problems (e.g. hyperexcitability especially in children), Tourette's Disorder
Contraindications: hypersensitivity, toxic CNS depresssion or comatose states, Parkinson's disease
Precautions: c CV disorders (could cause hypotension of angina), c anticonvulsive therapy (↓ convulsive threshold)
Side Effects: Tardive Dyskinesia, extrapyramidal symptoms, hypotension
Interactions: CNS ↓ potentated by EtOH, other analgesics, and narcotics, may block vasopressor action of epinephrine, ↑ interocular pressure c atropine, scopolamine
**Muscle relaxants**

**cyclobenzaprine hydrochloride [Flexeril® R]**

si’klo•ben’zi’pr i•hdro•klo’rid [flek]

Availability: tablet: 10 mg cyclobenzaprine hydrochloride

Action: acts within CNS at brain stem (as opposed to spinal cord levels), highly protein bound, excreted by kidneys

Indications: skeletal muscle spasm (hyperactivity)

Contraindications: hypersensitivity, hyperthyroidism, concomitant MAO (monoamine oxidase) inhibitors use, or within 14 days after discontinuation, acute recovery phase of MI, arrhythmias, heart blocks, conductance disturbances, CHF

Precautions: not effective for muscle spasms associated with cerebral or spinal cord disease, or children with cerebral palsy, avoid EtOH

Side Effects: chronotrope (atropine like), dry mouth (7-27%), blurred vision (1-3%), drowsiness (16-39%), dizziness (3-11%), constipation (1-3%), fatigue (1-3%), H/A (1-3%), nervousness (1-3%)

Interactions: MAO inhibitors, enhances effects of alcohol, opioids (codeine, hydrocodone, morphine), haloperidol, barbiturates, and other CNS depressants

Dose: 10 mg PO t.i.d. (use only for short periods, 2-3 weeks)

**Antihistamines**

Virtually all H1 blockers have the same indications. Diphenhydramine is usually used for: bee stings, poison ivy, hypersensitivity, anaphylaxis, and seasonal allergies. Others are generally used for seasonal allergies.

**diphenhydramine hydrochloride [Benadryl 25®]**

di’ten•hi’dra•men hi•dro•klo’rid [be’na•dril]

Availability: tablet: 25 mg diphenhydramine hydrochloride (OTC) ampul: 50 mg/mL in 1 mL vial

Action: antihistamine (blocks H1 receptors), sedation

Indications: anaphylaxis //an’ah•fi•lak’sis//, allergies (rhinitis \ri•ni’tis\, sneezing, tearing, hives, itching), dystonic reactions due to phenothiazines //fe’no•thi ‘ah•zi•dez//, motion sickness (antiemetic in small animals), sedation

Contraindications: asthma, glaucoma, COPD (if problems with mucosal secretions), SOB, enlarged prostate, nursing mothers, caution with hypertension

Side Effects: dries bronchial secretions, palpitations, excitability in children, antitussive

Interactions: hypotonic, sedatives, tranquilizers, EtOH to sedation, potentiates effects of other antihistamines

Dose: **allergies:** 25-50 mg q 4-6h PO, IM, IV

**sedation:** 25-50 mg q 4h PO (losses sedative effect after 3-4 days) (elderly or enfeebled patients initial dose of 1/2 minimal dose is often effective)

Pediatric Dose: (†20 lb) 12.5-25 mg 6-8h PO (max: 300 mg/day) {5 mg/kg/day}

Dog Dose: motion sickness & antiemetic: 2-4 mg/kg PO q 8 h

urticaria & angioedema: 2 mg/kg IM PRN (é prednisone 2 mg/kg IM bid & epinephrine 0.05-0.2 mg SQ)

itching: 25-50 mg PO b.i.d.-t.i.d., distonic reactions: 2-5 mg/kg IV

**chlorpheniramine maleate [Chlor-Trimeton®]**

klor’fen•ir’a•men [klor’tri’mê•ton]

Availability: tablet: 4 mg chlorpheniramine maleate

Action: antihistamine (blocks H1 receptors)

Indications: allergies (rhinitis, sneezing, tearing)

Contraindications: asthma, glaucoma, COPD (if problems with mucosal secretions), SOB, enlarged prostate, nursing mothers, caution with hypertension

Side Effects: anticholinergic (dry mouth, urinary retention), sedation, drowsiness, excitability in children

Interactions: potentiates effects of other antihistamines and depressant effects narcotics, not ÉtOH

Dose: 4 mg q 4-6h PO

Pediatric Dose: (6-11 y) 2 mg q 4-6h PO

Dog Dose: 4-8 mg q 12h IV, IM, SC, PO (max: 0.5 mg/kg q 24h)
chlorpheniramine maleate [Chlor-Trimeton® REPETABS®]

Availability: tablet: 12 mg chlorpheniramine maleate (timed released formulation)
Dose: (> 12y) I q 8-12h PO (do not exceed 3 tablets in 24h)

Motion Sickness

meclizine hydrochloride [Bonine®, Antivert® B]

měkˈlɪziːn hɪˈd्रəˌkloˈrɪd [bɔˈnɛn]
Availability: tablet: 25 mg meclizine hydrochloride
Action: antihistamine (blocks vasopressor response to histamine)
Indications: N/V, & dizziness c motion sickness
Contraindications: asthma, glaucoma, emphysema, COPD, SOB, dyspnea, children < 12y, pregnant or nursing women
Precautions: do not drive or operate machinery
Side Effects: may cause drowsiness (especially c alcohol, sedatives, & tranquilizers)
Dose: 12.5-25-50 mg q 24h (administer 1h before embarkation)
Pediatric Dose: (> 12y) 25-50 mg q 24h (administer 1h before embarkation)
Dog Dose: 25 mg q 24h PO (motion sickness: administer 1h before embarkation)

scopolamine hydrochloride (patch) [Transderm Scop® B]

skoˈpɔləˌmən hɪˌdɾəˌkloˈrɪd [trænsˈdɛrm skɔp]
Availability: patch (circular flat disk): 1.5 mg scopolamine
Action: to prevent N/V of motion sickness for 3 days
Indications: glaucoma, children, elderly, pregnant or nursing women
Contraindications: c metabolic, liver, kidney diseases, urinary, stomach, or intestinal obstructions, drug withdrawal symptoms if used > 3 days, limit contact c water, do not reapply a disk once in use, wash hands after application
Side Effects: dryness of mouth (66%), drowsiness (17%), mydriatic if applied to eye, phychosis
Interactions: codeine & hydrocodone (paralytic ileus)
Dose: 1 disc to dry area of skin behind ear (4h before needed) for 3 days

Decongestants

pseudoephedrine hydrochloride [Sudafed®]

Availability: tablet: 30 mg pseudoephedrine hydrochloride (OTC)
liquid: 30 mg in 5 mL (1 tsp) pseudoephedrine hydrochloride (OTC)
Action: promotes nasal drainage
Indications: for relief of nasal congestion due to upper respiratory infection or allergy
Contraindications: caution c underlying heart disease, HTN, thyroid disease, diabetes, enlarged prostate gland
Side Effects: tachacardia, dizziness, nervousness, sleeplessness, HTN
Interactions: not c antihypertensive, antidepressant, or MAO inhibitors
Dose: 60 mg q 4-6h PO (max: 4 doses in 24h)
Pediatric Dose: (6-12 y) 30 mg q 4-6h PO; (2-6y use liquid) 15 mg q 4-6h PO

pseudoephedrine hydrochloride [Sudafed®] 12 Hour

Availability: tablet: 120 mg pseudoephedrine sulfate (OTC)
Dose: 1 tablet q 12h (same for pedi > 12 y)

oxymetazoline hydrochloride [Afrin®]

okˈsɛˌmɛtˈɑːhˌzɔlˈlən hɪˌdʒɔˌkləˈrɪd [ɑˈfrɪn]
Availability: nasal spray: 0.5 mg (0.05%) oxymetazoline hydrochloride per mL in 3 mL bottle
Steroids

Prednisone

Action: sympathomimetic (constricts smaller arterioles of nasal passages)
Indications: for relief of nasal congestion due to upper respiratory infection or allergy
Precautions: do not use product for more than 3 days, CAD and angina
Dose: 2-3 sprays c head upright q 12h
Pediatric Dose: (> 6y) 2-3 sprays c head upright q 12h

Dexamethasone [Decadron®, Hexadrol®, Azeum®]

Availability: tablet: 5, 10, 20 mg prednisone
Action: anti-inflammatory
Indications: emergency Tx of allergic reactions (anaphylaxis: urticaria & angioedema), asthma
Contraindications: systemic fungal infections
Precautions: use c shingles involving the eye can cause corneal ulceration, enhanced effect c hypothyroidism and cirrhosis, c coexisting ulcerative diseases, GI bleed
Side Effects: drug-induced secondary adrenocortical insufficiency (after 2 weeks), potential for psychic derangements aggravated by preexisting psychotic tendencies, ↑ blood sugar (glucosuria)
Interactions: potentates effects of other anti-inflammatory drugs
Dose: Loading: 40-60 mg/day; ↓ by 10mg/day after 3 days
Pediatric Dose: Anti-inflammatory: 0.5-1 mg/kg q 12-24h, then q 48h, IV, IM, PO
Pediatric Dose: Shock: 15-30 mg/kg IV q 4-6h; urticaria & angioedema: 2 mg/kg PO, IM bid
Adult Dose: 0.25-1.0 mg/kg b.i.d. IM, PO
Pediatric Dose: 0.5-1.0 mg/kg b.i.d. PO (gradually ↓ dosage to lowest effective dose given every other day)

Hydrocortisone acetate c pramoxine HCL [Pramosone®]

Hydrocortisone acetate c pramoxine HCL 1%
Availability: tube: 1 oz hydrocortisone acetate 1% c pramoxine HCL 1%
Action: hydrocortisone (steroid: anti-inflammatory, anti-pruritic, vaso-constrictive), pramoxine (topical anesthetic)
Indications: inflammation, severe itching of skin
Contraindications: viral disease, circulatory impairment, hypersensitivity, do not use in eye
Precautions: c infection use appropriate antifungal or antibacterial agent, if favorable response does not occur promptly then discontinue, if occlusive dressings are used possibility exists for ↑ systemic absorption
Side Effects: ↓ healing
Interactions: caution c systemic corticosteroids
Dose: apply to affected area t.i.d. or q.i.d.
triamcinolone acetonide [Kenalog 0.1%®]

Availability: tube: 1 mg triamcinolone acetonide/g of cream in 15g tube
Action: steroid: anti-inflammatory, anti-pruritic, vaso-constrictive
Indications: strong allergic reactions on the skin
Contraindications: hypersensitivity, do not apply to face, do not apply when fungal infection suspected
Precautions: occlusive dressings † the precutaneous absorption (children are more susceptible to systemic toxicity)
Side Effects: ↓ healing of wounds, ↑ bacterial and fungal growth
Interactions: caution with other systemic corticosteroids
Dose (All): apply to affected area b.i.d., t.i.d.

Gastrointestinal

calcium carbonate [Tums®]

Availability: tables: 500 mg calcium carbonate
Action: antacid
Indications: hyperacidity, acid indigestion, heartburn, upset stomach
Contraindications: alkalosis
Precautions: do not administer within 1-2 h of tetracycline product dosing, administer slowly
Side Effects: alkalosis, constipation
Interactions: synergistic with other antacids
Dose: 0.5-1.0 g q 1h (max: 8 g/day)
Pediatric Dose: 1-4 g/day PO
Dog Dose: 1-4 g/day PO

petrolatum jelly [Vaseline®]

Availability: tubes: 1-2 oz petrolatum jelly
Action: laxative (lubricates fecal material & intestinal mucosa, reduces reabsorption of water by intestinal mucosa, ↑ fecal bulk & intestinal transit time)
Indications: constipation
Precautions: administer between meals so as not to interfere with fat soluble vitamin absorption.
Dog Dose: 2-60 ml PO
Note: In the horse mineral oil is administered through a stomach tube.

bismuth subsalicylate [Pepto-Bismol®]

Availability: tablet: 262 mg bismuth subsalicylate, Liquid: 130 mg bismuth subsalicylate per tablespoon
Action: exact mechanism unknown
Indications: diarrhea, heartburn, indigestion, nausea
Contraindications: hypersensitivity to salicylates, children recovering from chicken pox or flu (vomiting is an early sign of Reye's Syndrome), pregnant or nursing women
Precautions: contains salicylates, caution with anticoagulation, diabetics, & gout, diarrhea + fever
Side Effects: tinnitus (OD), temporary darkening of tongue and/or stool (green-black), constipation
Interactions: additive effect with other salicylates (e.g. aspirin), hydrocortisone, tetracyclines, cipro (may be inactivated or absorption ↓)
Dose: diarrhea prophylaxis: † tablets q.i.d.
    † tablets q ½-1h PO (max: 8 doses in 24h)
Pediatric Dose: (9-12y) † tablet; (6-9y) 2/3 tablet; (3-6y) 1/3 tablet q ½-1h PO (max: 8 doses in 24h);
(0-3y) contraindicated: can cause severe constipation and impaction
Dog Dose: diarrhea: 20-50 mg/kg/day (in divided doses) PO
Horse Dose: diarrhea: 70 mg/kg PO tid-qid

bisacodyl [Dulcolax®]
DRAFT: 5 September 1994

[dul'co•lax]
Availability: tablet: 5 mg bisacodyl
Action: contact laxative acting on colonic mucosa to produce normal peristalsis of the colon
Indications: acute constipation, constipation during pregnancy
Contraindications: acute surgical abdomen (unexplained abdominal pain, N/V)
Precautions: laxative dependence during frequent use
Interactions: do not take within 1 hr of antacids or milk
Dose: 1 tablet/swallowed whole (at bedtime)
Pediatric Dose: (> 6 y) 1 tablet swallowed whole
Dog Dose: 1 tablet q 8-24h PO

Ioperamine hydrochloride [Imodium® A-D]
Availability: capsule: 2 mg ioperamine
Action: ↓ intestinal motility, & effects water and electrolyte movement through bowel
Indications: control and symptomatic relief of acute nonspecific diarrhea
Contraindications: hypersensitivity to drug, use for > 2 days, if accompanied by ↑ fever, blood in stool
Side Effects: may ↓ speed at which enteric microbes are evacuated (prolonging illness)
Dose: 1 capsule, then 1 capsule p loose bowel movement (max: 4 capsules/day)
Pediatric Dose: 2-5 y (24-47 lb): ½ capsule p loose bowel movement (max: 1 ½ capsules/day)
6-8 y (48-59 lb): 1 capsule, then ½ capsule p loose bowel movement (max: 2 capsules/day)
9-11 y (60-95 lb): 1 capsule, then ½ capsule p loose bowel movement (max: 3 capsules/day)
Dog Dose: diarrhea: 0.1-0.2 mg/kg q 8-12h PO (1 capsule/25 kg body weight PO qid) (> 10 kg)

Prochlorperazine [Compazine® R]
prô 'klor•pê•r'â•zen [komp'ahr•zen]
Availability: tablet: 10 mg prochlorperazine; ampul: 5 mg/mL in 2 mL ampul
Action: phenothiazide weak anticholinergic, strong extrapyrimidal, & moderate sedative effects, antiemetic
Indications: control of N/V, psychotic disorders (2nd line)
Contraindications: comatose states, children < 2 y or < 20 lb, CNS depressants, pregnant or nursing women, pt bone marrow depression, hypersensitivity to phenothiazide
Precautions: extrapyramidal symptoms (EPS) can be confused with CNS s/s of Reye's syndrome, or other encephalopathy, neuroleptic malignant syndrome (NMS), antiemetic action mask s/s of OD of other drugs, anticholinergic (caution with glaucoma), interfeles with thermoregulation
Side Effects: tardive dyskinesia (rhythmic involuntary movement of tongue, face, mouth, rarely extremities), thiazide diuretics ↑ orthostatic hypotension (pressor agents can cause paradoxical ↓ hypotension), agitation, insomnia, dystonias (muscle spasm: neck, back, carpo-pedal, tongue, jaw)
Interactions: ↑ plasma levels of propranolol, alpha-adrenergic blocker
Dose: N/V: 5-10 mg PO t.i.d. or q.i.d. (max: 40 mg/day)
Non-psychiatric anxiety: 5 mg PO t.i.d. or q.i.d. (max: 20 mg/day)
Pediatric Dose: N/V: 2½ mg/kg PO, PR b.i.d. or t.i.d. (max 1st day: 10 mg, max 2-5y: 20 mg/day, max 6-12y: 25 mg/day) [avoid use in young kids, administer fluids only]
Dog Dose: 0.1-0.5 mg/kg q 6-8h IM, SC

Ophthalmic
tetracaine hydrochloride (ophthalmic solution) [Pontocaine® R, Achromycin® R]
tet'ra•kā•n hī'dro•klo'rid [ak•ro'mi'sin]
Availability: 1 mL dropper bottle
Action: local anesthetic of the ester linkage type (related to procaine)
Indications: anesthetic for eye examination only
Contraindications: hypersensitivity to drug
Precautions: use for exam only, possible eye damage if used for removal of an existing foreign body
Interactions: not sulfonamides (inhibits action)
DRAFT: 5 September 1994

**cyclopentolate hydrochloride** (ophthalmic solution) [Cyclogyl® B]

*si'klo•pen·tol•ahl hrid•kl′rd* []

**Availability:** liquid: 0.5%, 1%, 2% solution of cyclopentolate in 2 mL dropper bottle

**Action:** cycloplegic (paralysis of ciliary muscle) & mydriatic (dilation of pupil), rapid action but shorter duration than atropine

**Indications:** pain in corneal abrasion, or if patching eye

**Contraindications:** hypersensitivity, glaucoma (narrow angle anterior chamber)

**Precautions:** may cause CSN disturbances (young), observe for 30 min post administration

**Side Effects:** alters vision, similar to other anticholinergic drugs

**Dose (All):** 1 gtt in effected eye, followed by 1 gtt in 5 min (infants use only 0.5% conc)

**polymyxin B-Bacitracin** [Polysporin Ophthalmic Ointment B]

*pöl′ë-miks′in b bäs•ä-trä′sin* [pöl′ë-spor′in]

**Availability:** ointment: polymyxin B sulfate and bacitracin zinc in white petroleum jelly (1/8 oz tube)

**Action:** bacteriosidal (gram +&- bacilli, gram - cocci)

**Indications:** superficial ocular infections involving the conjunctiva and/or cornea caused by susceptible organisms

**Contraindications:** hypersensitivity to components

**Precautions:** ophthalmic ointments may retard corneal healing, prolonged use may result in overgrowth of nonsusceptible organisms including fungi

**Dose (All):** apply a ribbon ½" long (in pocket between eye and eyelid, then look down before closing lids) q 3-4 h & @ bedtime

**acetazolamide sodium** [Diamox® B]

*as′et•ah•zol′ah•mid [dia•mox]*

**Availability:** tablet: 250 mg acetazolamide sodium

**Action:** controls fluid secretion (carbonic anhydrase inhibitor)

**Indications:** edema due to CHF, centrencephalic epilepsies, chronic open-angle glaucoma, acute mountain sickness in climbers attempting rapid ascent

**Contraindications:** when Na, & K blood serum levels ↓, kidney, liver, adrenal dysfunction, hypercholeoremic acidosis, 1st trimester pregnancy

**Precautions:** ↑dose does not ↑diuresis (may ↑drowsiness & paresthesias)

**Side Effects:** minimal (paresthesias, loss of appetite, polyuria, drowsiness, confusion, photosensitivity)

**Interactions:** aspirin (concomitant administration with high-dose aspirin may result in anorexia, tachypnea, lethargy, coma and death).

**Dose:** acute mountain sickness: 500-1000 mg/day (divided doses) initiate dosing 24-48 hrs before ascent and continue for 48 hrs (or as necessary)

**Fluorescein strips**

**Availability:** strip

**Action:** green coloration sticks to damaged tissue

**Indications:** abrasions of the cornea and conjunctiva

**Contraindications:** hypersensitivity

**Dose (All):** touch inside lower lid of eye with end of strip moistened with saline, inspect under (cobalt blue) light

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**Cardiac/Respiratory**

**albuterol (salbutamol)** [Proventil®, Ventolin® B]

*äl′bü•ter′ōl [pro•ven′til, vent′ō•lin]*

**Availability:** metered dose inhalation: 90 µg per inhalation

**Action:** sympathetic agonist (β₂ selective, bronchodilatation)

**Indications:** asthma, bronchospasm (associated with COPD/bronchitis/emphysema)
epinephrine 1:1000 (adrenalin) [EpiPen®, Ana-kit® B]

ep′in•ef′rin (ä•dren′a•lin) []

Availability: auto-injector: 0.3 mg epinephrine per injection ampul: 1 mg/mL in 1 mL vial

Action: sympathetic agonist (bronchodilatation, inotrope, chronotrope)

Indications: emergency Tx of allergic reactions (anaphylaxis), bronchial asthma

Contraindications: no absolute contraindications if indicated, tachyarrhythmias, hypertension

Precautions: monitor vitals, and EKG; protect from light and cold, if overuse of β agonists it may cause cardiac arrest

Side Effects: palpitations, tachycardia, anxiety, tremor, H/A, NN, arrhythmias

Interactions: potentiates action of other sympathetic agonists, effects potentated by tricyclic antidepressants and MAO inhibitors

Dose: 0.3 - 0.5 mg SQ q 20 min

Pediatric Dose: 0.01 mg/kg to 0.3 mg SQ q 20 min

Dog Dose: bronchoconstriction & anaphylaxis: 0.02 mg/kg to 0.5 mg SQ, IM q 20-30 min

Horse Dose: anaphylaxis: 3-8 mg per 450 kg IM, SQ

nifedipine [Procardia®, Adalat® B]

ni•fed′ip•en [pro•kar′de•ah]

Availability: capsule: 10 mg nifedipine

Action: Ca²⁺ channel blocker, smooth muscle relaxant (arteriolar vasodilation), ↓ peripheral vascular resistance

Indications: angina pectoris, severe hypertension, chilblain

Contraindications: hypotension, hypersensitivity to drug

Precautions: monitor vitals, may worsen CHF, not β blockers

Side Effects: dizziness, flushing, N/V, headache, weakness, hypotension

Interactions: ↑ risk of CHF ~ β blockers

Dose: 10 mg SL (puncture capsule and place under tongue, or swallow)

Pediatric Dose: 0.25-0.5 mg/kg SL

Antimicrobials

A good rule of thumb is to give therapy for 2-3 days after the temperature is normal and other signs of infection have dissapeared. All PO antibiotics should be taken 1 hr before or 3 hrs after food and other meds (especially antacids) to aid absorption from the intestinal tract. Monitor for signs of anaphylaxis. Do not mix therapy unless instructed to by command physician.

ciprofloxacin [Cipro® B]

Availability: tablet: 250, 500, 750 mg ciprofloxacin

Action: broad spectrum antibiotic interferes with bacteria reproduction

Indications: lower respiratory, skin, bone, joint, & UTIs, infectious diarrhea, PID, sinusitis

Contraindications: hypersensitivity to other quinolone class antibacterials (nalidixic acid, cinoxacin, & floxin), pregnant & nursing women, children, immature animals, not effective against anaerobes

Precautions: may cause CNS stimulation, discontinue if hypersensitivity (skin rash, lip edema)

Side Effects: crystalluria in animals (keep pt well hydrated), dizziness, lightheadness, N/V, diarrhea

Interactions: prolongs halflife of theophyline, antacids containing magnesium or aluminum can interfere with absorption

Dose: UTIs: 250 mg q 12h; others: 500-750 mg q 12h (continue +2days after s/s have dissapeared; usually 1-2 weeks)

Dog Dose: UTIs: 5-8 mg/kg q 12h PO; skin & bone: 10-15 mg/kg q 12h PO; Contraindicated in dogs < 1 y old and during pregnancy, causes lameness (lesions of the cartilage in weight bearing joints) in immature dogs.
**ceftriaxone sodium [Rocephin®]**

**Availability:** vial: 1g ceftriaxone crystalline powder (IM/IV: reconstitute 3.6/9.6 mL LR 250/100 mg/mL conc)

**Action:** 3rd generation cephalosporin antibiotic (inhibits cell wall synthesis), effective against aerobic and anerobic, gram +/- lower respiratory tract, skin, bone, joint, intra-abdominal, & UT infections, gonorrhea, PID, meningitis, surgical prophylaxis where procedure sterility is in question

**Indications:** hypersensitivity to cephalosporin class antibiotics

**Precautions:** do not exceed 2 mg/day hepatic & renal disease, GI disease (colitis), prolonged use causes overgrowth of nonsusceptible organisms

**Side Effects:** GI (abdominal cramping, N/V, diarrhea), urticaria, growth of fungi (c long term use)

**Dose:** 1-2 gm/day (in 2 divided doses) IV, IM for 4-14 days (+2 days after s/s of infection gone) meningitis: 100 mg/kg/day (max: 4 gm/day); gonorrhea: 250 mg IM (x1) surgical prophylaxis: 1 gm 1/2-2 hr before surgery (x1)

**Pediatric Dose:** 50-75 mg/kg/day (in 2 divided doses) IV, IM (max: 2 gm/day)

**erythromycin [Erythocin®]**

**Availability:** tablet: 250, 333 mg erythromycin

**Action:** inhibition of protein synthesis in susceptible organisms

**Indications:** upper & lower respiratory tract (e.g. otitis media, pharyngitis) (streptococcus) (penicillin V is drug of choice in Tx of streptococcal pharyngitis), skin & soft tissue (staphylococcus aureus) infections of mild to moderate severity, intestinal amebiasis (2nd line to Flagyl)

**Contraindications:** hypersensitivity to drug, jaundice

**Precautions:** impaired hepatic function (excreted by liver)

**Side Effects:** GI (abdominal cramping, N/V, diarrhea), urticaria, growth of fungi (c long term use)

**Interactions:** theophylline levels (potential for toxicity), carbamazepine levels in childern using this drug (toxicity: ataxia, dizziness, N/V), cyclosporine levels, vasospasm associated c argotamine (Tx of migraine), terfenadine??, not c Seldane® or Hismanol®, effect of Procaine [Novocain®], not c hypoglycemic agents (induces hypoglycemia)

**Dose:** 1 g/day in divided doses (250 mg q.i.d.) for at least 10 days (dosage may be up to 4 or more g/day according to severity, b.i.d. not recommended > 1 g/day)

**Pediatric Dose:** 30-50 mg/kg/day in divided doses

**Dog Dose:** 10 mg/kg q 8h PO (5-20 mg/kg q 8-12h PO)

**Horse Dose:** 10 mg/kg q 6h PO

**miconazole nitrate [Monistat-derm® B, Micatin®]**

**Availability:** tube: 15g (miconazole nitrate 2% conc)

**Action:** topical anti-fungal (imidazole class)

**Indications:** athlete's foot (Tx till gone, could be for 1 month), vaginal yeast infections

**Precautions:** discontinue use if irritation occurs, not for use in the eye

**Side Effects:** contact dermatitis, itching, burning

**Dose:** cover affected area b.i.d.

**Antitussive**

**dextromethorphan hydrobromide [Hold®]**

**Availability:** lozenge: 5.0 mg dextromethorphan HBr (10 in a plastic tube)

**Action:** antitussive

**Indications:** suppresses coughs for up to 4 hrs

**Contraindications:** chronic cough, or where cough accompanied c excessive sputum

**Dose:** fl lozenges q 4 hr

**Pediatric Dose:** (6-12 h) fl lozenge q 4 hr

**Dog Dose:** 0.5-2 mg/kg q 6-8 h PO


**DRAFT: 5 September 1994**

**Others**

**Actated Ringers [Hartman's Solution]**

- **Availability:** 1L bag for IV administration
- **Action:** approximates the electrolyte concentration of blood (isotonic crystalloid)
- **Indications:** hypovolemia
- **Contraindications:** pulmonary edema (CHF), renal failure
- **Precautions:** monitor for circulatory overload
- **Use:**
  - **Bolus:** 150-300 mL IV then reassess
  - **KVO:** 10 mL/hr
- **Pediatric Dose:**
  - **Bolus:** 20 mL/kg IV, IO then reassess
- **Dog Dose:**
  - **Bolus:** 10-40 mL/kg IV, IO then reassess
  - **Maintenance:** 40-50 mL/kg/day IV
- **Horse Dose:**
  - **Bolus:** 5-10 L q 30-60 min
  - 3-7% NaCl (hypertonic solution): 4-6 mL/kg

**Thiamine Hydrochloride (vitamin B₁)**

- **Availability:** tablet: 300 mg, ampul: 100 mg in 1 mL
- **Action:** required for the metabolism of glucose
- **Indications:** coma of unknown origin, alcoholism, delirium //dilirˈe̱m// tremens, adjunct in ethylene glycol poisoning therapy
- **Use:**
  - 100 mg IV, IM; 300 mg PO
- **Dog Dose:**
  - 2 mg/kg IM, PO q 24 h

**Ethylene Glycol Toxicity:** 100 mg PO q 24 h (facilitate glyconate to nontoxic metabolites)

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<table>
<thead>
<tr>
<th>Rocky Mountain Poison Center</th>
<th>(800) 525-6115</th>
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<tbody>
<tr>
<td>Animal Poison Control Center (University of Illinois)</td>
<td>(217) 333-3611</td>
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<tr>
<td>National Pesticides Telecommunication Network (EPA)</td>
<td>(800) 858-7378</td>
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<tr>
<td>Oklahoma Poison Information Center (snake antivenin)</td>
<td>(800) 522-4611</td>
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<tr>
<td>Pittsburgh Poison Center (Pittsburgh, PA)</td>
<td>(412) 681-6669</td>
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<tr>
<td>Delaware Valley Regional Poison Control Center (Philadelphia, PA)</td>
<td>(215) 386-2100</td>
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<tr>
<td>Northwest Regional Poison Center, St. Vincent Health Center (Eire, PA)</td>
<td>(800) 822-3232</td>
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<th>Adult</th>
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<th>Horse</th>
<th>Llama</th>
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<tbody>
<tr>
<td>Rectal Temp °F(°C)</td>
<td>99.6(37.5)</td>
<td>99.6(37.5)</td>
<td>99.5(37.5)</td>
<td>99(37.2)-101.3(38.5)</td>
<td>99.5-102.7 foal</td>
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<tr>
<td>Heart Rate (beats/min)</td>
<td>60-100</td>
<td>85-205(&lt;.25y)</td>
<td>100-190(.25-2y)</td>
<td>100-130</td>
<td>64-128 (&lt;3m)</td>
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<td>60-140(2-10y)</td>
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<td>40-80 (3m-2y)</td>
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<td>28-40 (&gt;2y)</td>
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<td>Respiratory Rate</td>
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<td>Circulating blood volume</td>
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