OTC (Over-The-Counter) Products [1-6]

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COMPLAINT & TREATMENT NOTES	GENERIC NAME (Pregnancy [7,8,9,10,11] category ↓)	TRADE NAME	USUAL DOSE Adult / Pediatric (Daily MAXIMUM)	$ / pkg	COMMENTS
COLDS					
CONGESTION ◆nasal decongestants: Cochrane Review [73]: single dose in adults moderately effective for cold (13% ↓ symptoms); not recommended for children (especially <6months) with common cold (lack of data & reports of CNS, CV side effects) ◆oral – limited data, especially in children [76] ◆limit **nasal preps** to **3-7 days** to **avoid** problems with **rebound congestion** (≤ 3 days with phenylephrine) ◆antihistamines of questionable benefit in common cold [72]; anticholinergic activity provides extra drying (? benefit) ◆saline drops or spray possible alternative but less effective	**ORAL** ◆Pseudoephedrine C	**SUDAFED** (12hr formulation and pediatric tabs also available)	60mg q4-6h or 120mg q12h; MAX 240mg/d 2-5 yrs:15mg q4-6h; MAX 60mg/day 6-11yrs: 30mg q4-6h; MAX 120mg/d	6-8	◆**SE**= insomnia, tremor, irritability & headache ◆oral decongestant: **caution** in pts with ↑ BP, heart Dx, β-blockers[56], hyperthyroidism, diabetes, glaucoma [narrow angle] & prostatic hypertrophy ◆**nasal agents** - less concern with above cautions but systemic absorption still possible ◆**Phenylpropanolamine** (PPA) **not** recommended: products withdrawn - rare ↑'d **risk of stroke** in ♀<50yrs[64]
	◆Phenylephrine (Note: short acting) C	**DIMETAPP** select version **DRISTAN** reg tabs	10mg q4h; MAX 60mg/day 2-5 yrs: 2.5mg q4h; MAX 15mg/day 6-11yrs: 5mg q4h; MAX 30mg/day	5-7	
	NASAL ◆Oxymetazoline C	**DRISTAN LONG LASTING NASAL MIST**	2-3 drops or sprays q10-12h up to BID MAX 2 applications/24hrs Adults: 0.05% Peds: 0.025% ≥2yr 2drop	5-7	**COMBINATION PRODUCTS:** generally not recommended - less flexibility in dosing, more adverse effects; however, convenient for multiple symptoms e.g. acute sinusitis & associated headache {ADVIL COLD & SINUS ibuprofen 200mg + pseudoephedrine 30mg}
	◆Xylometazoline C	**OTRIVIN**	2-3 drops or sprays q8-10h up to TID Adults: 0.1% Peds: 0.05% ≥6month 2 drop	5-7	
	◆Saline Nasal Spray A	**SALINEX** ▼ ✓ **Pediatric option**	1 spray TID-QID PRN	5	
	◆**Nasal Phenylephrine (eg.** REGULAR DRISTAN NASAL MIST **)** not recommended - **short duration, frequent admin, rebound congestion more likely**				
COUGH ◆**acute** (ie. <3-8wks duration) usually due to self-limiting viral infection ◆chronic [13,86] (>8wk) usually symptom of underlying resolvable cause: -drugs (ACEI's- persists <4wks after stopping) -GERD, asthma, COPD (smokers) -allergies or postnasal drip Treat underlying cause; interim use of antitussives may be warranted. ◆hydration: oral liquids & humidified air ◆**Rx** prep (↑ codeine doses- **TYLENOL #3**; hydrocodone- **TUSSIONEX**, others) are avail.	◆Dextromethorphan (**DM**) C **Evidence for clinical effectiveness of OTC products in acute cough is limited & conflicting.** [12,74,92]	**BENYLIN DM** ▼ {12hr formulations: ▼ **BENYLIN DM 12hr , DELSYM DM 12hr…** 2 tsp (60mg) po BID}	10-20mg q4h; 30mg q6-8h MAX 120mg/d 2-5yrs: 2.5-5mg q4h or 7.5mg q6-8h; MAX 30mg/d; 6-11yrs: 5-10mg q4h or 15mg q6-8h; MAX 60mg/d	5-8	◆sugar & alcohol in some products may be of **concern** in diabetes & kids (some >14 kcal/dose) ◆Codeine preps: **SE**= drowsiness, nausea, constipation; not recommended in asthmatics ◆Rx Salbutamol **VENTOLIN** ?? in acute bronchitis [14,15] ◆**in general, products designated with:** **DM** contain **Dextromethorphan** (suppressant) **D** contain a **decongestant** **E** contain an **expectorant (ie. Guaifenesin)**
	◆Guaifenesin - not a suppressant but reduces viscosity & may aid in expectoration of sputum C	**ROBITUSSIN** *(plain)*	200-400mg q4-6h; MAX 2.4g/day 2-5 yrs: 50-100mg q4-6h; MAX 600 mg/day 6-11yrs:100-200mg q4-6h; MAX 1.2 g/day	6-7	
	◆Codeine – avail. OTC in 3.3mg/tsp liquid formulas with ≥ 2 other active ingredients (eg. **Benylin Codeine, Robitussin with Codeine**) C	**Effective dose of codeine** = 10-20mg q4h; MAX 120mg/d 2-5 yrs: 1-1.5mg/kg/d (use calibrated syringe for measuring); 6-11yrs: 5-10mg q4-6h; MAX 60mg/d. Contraindicated: <2yrs. Label dosing guidelines of most OTC [codiene containing] cough syrups results in subtherapeutic levels of codeine in adults.		5-9	
ALLERGY					
ALLERGY – SYSTEMIC [5,16-24,99] ◆**oral antihistamines** relieve all (to some extent) allergic symptoms except nasal congestion (exceptions: desloratadine[25] & cetirizine[26] may aid congestion). If congested short-term oral decongestants may be required (avoid topical decongestants). ◆↑ **efficacy if used prophylactically** {Terfenadine SELDANE, astemizole HISMANAL no longer marketed due to rare risk of arrhythmias} ◆**Rx** SINGULAIR -less effective than intranasal steroids.[27-29]	***1st Generation oral:*** ◆Chlorpheniramine B	**CHLORTRIPOLON** ▼ (12hr Repetabs also – 1 tab (12mg) po BID; syrup; tabs)	4mg q4-6h;4-8mg @hs;MAX 24mg/day 2-5yrs: 1mg q4-6h; MAX 6mg/d 6-11yrs: 2mg q4-6h; MAX 12mg/d	8-12	◆USEFUL for itch, sneeze & **urticaria** symptoms ◆NOT very USEFUL for sinonasal congestion ◆**Pregnancy**: 1st gen:chlorpheniramine preferred or B agents
	◆Diphenhydramine B	**BENADRYL** ▼ syrup,cap,tab -esp. for anaphylactic reactions	25-50mg q4-6h; MAX 150mg/day 2-5yrs: 6.25mg q4-6h; MAX 25mg/d 6-11yrs: 12.5mg q4-6h; MAX 75mg/d	6-8	◆1st generation **caution** in narrow angle glaucoma, bladder neck obstruction, heart disease, hyperthyroidism & prostatic hypertrophy
	2nd Generation oral: B ◆Cetirizine hydroxyzine metabolite Useful: nasal congestion, sedating @ ↑ doses	**REACTINE** ▼ tab ⚲ ;syrup	5-10mg OD; 2-5yrs: 2.5mg OD-BID	8-10	◆**SE**: **sedation** esp. 1st gen (May not be an issue at low [63] doses –most Benadryl studies used 50mg as a comparator [21]) (paradoxical **stimulation** possible in kids & elderly) & **anticholinergic** (eg. dry mouth & nose, constipation, ↑ heart rate & ? ↓ lactation). Effects more common with 1st gen. [antihistamines]; negligible with more costly 2nd gen. 1st gen. start dose low & taper up [depending on sedation / diagnosis]
	◆Fexofenadine terfenadine metabolite DI: grapefruit juice, antacids C B	**ALLEGRA** ▼ tabs	60mg BID or 120mg OD 6-11yrs: 30mg BID; <6yr not recommended	10-15	
	◆Loratadine	**CLARITIN** ▼ reg. & dissolve tabs; syrup	10mg OD (kids >30kg: 10mg od) 2-9yrs: 5mg OD (tabs: tasteless & chewable)	12-15	
	◆Desloratadine loratadine metabolite Useful: nasal congestion [22] C	**AERIUS** 5mg tabs, liquid soon	5mg OD	18	◆headache = common ≤10% with 2nd gen agents ◆rare seizures reported with 1st & 2nd generation [55] ◆**2nd gen favored** by experts [5,17] due to less cognitive impairment, long acting & less SE.
	Also remember environmental factor modification!				
Rx Intranasal Steroid (INCS): (for allergic rhinitis) Beclomethasone▼, FLONASE▼, NASOCORT▼, NASONEX▼, RHINOCORT▼, RHINALAR▼. Rx anticholinergic nasal for rhinorrhea: ATROVENT▼. **Rx Ophthalmics: H_1 blockers:** LIVOSTIN ▼expiry 30day (also Livostin nasal✗), EMADINE✗; **H_1 & Mast Cell:** ZADITOR✗, PATANOL✗; **Mast Cell** slow onset**:** ALOMIDE▼, ALOCRIL✗▼.					
◆**Avoid** OTC topical decongestants due to rebound (**Vasocon-A, Naphcon-A, Albalon-A…**). ◆may require short term oral decongestants	◆Sodium cromoglycate B	**CROMOLYN**▼ Mast cell stabilizer **OPTICROM**▼	Adults & ≥2yr: 1 spray each nostril QID [3,5] 1-2 eye drops qid [expiry in 1 month after opened]	15-17	◆prophylatic if used before allergen exposure [but slow onset]
◆**Saline/Lubricating Sprays/Drops**	◆Saline solution ◆Methylcellulose… B	**EYE STREAM** **ISOPTOTEARS**▼	Use, wash out & flush as necessary - also **EYELUBE** ▼	7 9	Home-made saline generally not recommended as lack of sterility is a concern for nasal/ophthalmic preparations {level teaspoon of salt mixed in 250ml warm water}

Rx = non-OTC products available by prescription in Canada; see page 4 for description of additional abbreviations

	COMPLAINT & TREATMENT NOTES	DRUGS OF CHOICE		USUAL DOSE Adult / Pediatrics (Daily MAXIMUM)	$	COMMENTS (www.RxFiles.ca OTC Products)
GASTRO-INTESTINAL	**DYSPEPSIA** [35,36,57] **(non-ulcer)** ◆antacids & OTC histamine-2 receptor antagonists (H2RAs) effective for mild-moderate **episodic** heartburn & GERD; more severe cases require appropriate assessment + Rx therapy ◆important to avoid precipitating and aggravating factors (eg. stop smoking) ◆**persistent symptoms** should be self-medicated for **no longer than 2wks before seeking medical evaluation**	***Antacids/Protectants*** ◆Magnesium-aluminum hydroxide antacids	B	**MAALOX** **MYLANTA** Available in tablet & liquid forms; liquid may be more efficacious	50-100MEq QID (see label instructions) (1hr after meals & HS) ***RULE OUT* organic disease if >50yrs or any patient with alarm symptoms** {VBAD: persistent Vomiting, Bleeding / hematemisis / melena, Abdominal mass, Dysphagia; radiating chest pain, ↓weight, fatigue}	4-10	◆Mg+Al antacids preferred as constipating effect of Al^{+2} counterbalanced by laxative effect of Mg^{+2}; AVOID Sodium Bicarbonate products ◆**Pregnancy**: antacids & alginates preferred ◆antacids interfere with **absorption** of some drugs (bisphosphonates, digoxin, iron, tetracyclines & quinolone antibiotics); space **2hrs apart** ◆**OTC H2RAs comparable but NOT superior to antacids for episodic heartburn & GERD** ◆ranitidine may ↑ blood alcohol level ◆dyspepsia may be **drug induced**: e.g. alendronate, amiodarone, antibiotics [eg. erythromycin...], acarbose, herbs, iron, K^+ tabs,metformin, orlistat, NSAIDs, steroids & theophylline
		◆Alginates	B	**GAVISCON**	2-4tsp QID (after meals & HS)	8-12	
		OTC H2RAs ◆Famotidine	B	**PEPCID AC**	>12yrs: 10mg OD; can repeat x1 (MAX 20mg/d; 2wk trial)	6-10	
		◆Ranitidine	B	**ZANTAC 75**	>16yrs: 75mg OD; may repeat x1 (MAX 150mg/d; 2wk trial)	4-6	
	CONSTIPATION [37,65] ◆ensure adequate FIBRE (~25g/day); slowly ↑ intake of fruits & vegetables; begin with 1-2 TBSP/day wheat bran & ↑ up to 2-4 TBSP/day with FLUID ◆adequate FLUID INTAKE & regular EXERCISE is important ◆rule out impaction; treat underlying causes where possible ◆may be **drug-induced** (anticholinergics, analgesics esp. opiates, antacids with Al^{+2}, calcium and iron supplements, high dose diuretics, clonidine, calcium channel blockers esp. verapamil, & tricyclic antidepressants)	***Bulk forming*** ◆Psyllium	B	**METAMUCIL**▼ **PRODIEM**▼	4.5-20g/day ↑ gradually with adequate fluid (bacteria degrade fiber→ gas & bloating possible)	8-18	◆**bulk-forming** agents**, stool softeners** & **lactulose OK** for **chronic use; stimulant,** other **osmotic preps** for **short-term occasional use** (1-2 days duration, one course/week) EXCEPT stimulants useful with chronic opioid therapy ◆**Pregnancy**: bulk, lactulose & docusate preferred ◆**SE**: bloating, abdominal discomfort, flatulence common with most; stimulants & osmotics can cause cramping, abdominal pain & diarrhea. **Abuse & habit** forming potential. ◆ONSET: bulking & softening agents work over days; lactulose in 24-48hrs; stimulants & MOM within hours (overnight); Oral Fleet, suppositories & **GOLYTELY**▼ within ~1hr.
		Stool softeners ◆Docusate	C	**COLACE**▼	1-2 caps OD-BID (**not laxative per se & not effective except for softening**)	4-8	
		Stimulant: tend to ↑cramps ◆Senna: benign melanosis coli	C	**SENOKOT**▼**, EXLAX** **SENOKOT-S**▼ +docusate	1-2 tabs OD-BID (if OD, give at HS)	5-10	
		◆Bisacodyl	B	**DULCOLAX**▼	5-15mg tab HS/OD; 10mg supp OD	3-8	
		Osmotic ◆GLYCERIN ◆MOM ◆phosphate	C	**GLYCERIN** supp▼ *Milk of Magnesia*▼ **FLEET**▼ (oral & enema)	for immediate relief 15-30mls OD-BID Risk of hypermagnesemia for immediate relief Risk of hyperphosphatemia	4 5-10 7	
		◆Lactulose▼ Poorly absorbed sugar	B	**CHRONULAC, gen**▼	15-30mls OD-BID	30	
	DIARRHEA ◆OTC therapy is for mild-moderate cases only (ie. otherwise healthy adult, no fever, <2days duration, no blood) ◆most common CAUSES = infections, food, water, drugs (antibiotics, acarbose, chemotherapy, cholinergics, laxatives, Mg^{++}, misoprostol & orlistat, SSRIs) & IBS ◆**rehydration** critical esp. in infants & elderly; **PEDIALYTE** suitable for infants {Home made option: 1 tsp salt+8 tsp sugar in 1 liter water.}; **GATORADE** suitable for mild-moderate dehydration in adults ◆antibiotic-induced usually self-limiting (live culture yogurt helpful in restoring gut flora); if prolonged/severe, need assessment for C. difficile	◆Bismuth Subsalicylate	C	**PEPTO-BISMOL**▼ generics	Tx: 30ml or 2 tabs q30mins x 8doses/d Prophylaxis of Travellers Diarrhea: ⇨ 2 tabs or 30ml QID **Contraindicated in children esp≤3yrs**	5-10	◆**antidiarrheals are contraindicated in ≤2yrs**; treatment of infantile diarrhea should be rehydration & appropriate dietary measures, treatment of underlying causes ◆AVOID sorbitol, xylitol, lactose, any food triggers ◆prevention of Traveller's Diarrhea: ***Boil it, Cook it, Peel it or Forget it!*** ◆bismuth subsalicylate can turn tongue and stools black; beware salicylate overdose ◆kaolin not particularly effective but attapulgite (KAOPECTATE B) of limited usefulness for symptoms; psyllium(METAMUCIL B) also useful for symptom control - absorbs fluids, adds bulk ◆**avoid loperamide if dysenteric symptoms or high fever; can lead to retention of pathogens**
		◆Loperamide	B	**IMODIUM**▼ generics	4mg stat; 2mg after each loose bowel movement to max of 16mg (8tabs)/day Use cautiously in kids <12yrs; **Contraindicated if ≤2yrs old**	6-10	
		◆Rx preps: codeine & **LOMOTIL** available					
	Irritable Bowel Syndrome (IBS) [58-61] is characterized by disordered intestinal motility and alternating bouts of constipation and diarrhea. Organic causes must be ruled out. Therapy is symptomatic (loperamide for diarrhea, fiber for constipation, antispasmodics if indicated). **Lifestyle** changes are as important as drug therapy (avoid food triggers, adequate diet, fibre, fluids & exercise, reducing stress); underlying psychosocial co-morbidity should also be treated. Rx products such as antidepressants (**Elavil**), antispasmodics (**Buscopan**®, **Bentylol**®, **Modulon**✗ ✓, **Dicetel**✗ ✓, **Zelnorm**✗ ® for constipation [82]) may help.						
PAIN	**PAIN RELIEF – GENERAL** ◆for conditions self-limiting and of short duration including**:** lower back, dental, headache ◆**Caution**: many strengths, formulations and combination products available	◆Acetaminophen	B	**TYLENOL**▼ generics Acetaminophen available in many combo products. Ensure total MAX <4grams/day.	325-1000mg q4-6h MAX 4g/day (≤12yrs: 10-**15**mg/kg q4-6h: **MAX 65mg/kg/day +q4-6h prn**)	5-9	◆for more complete discussion of analgesic agents, see other ***Rx Files*** Comparative Charts: NSAIDs and other Analgesics Opiates Migraine Treatment & Prophylaxis Back Pain ◆maximum OTC ibuprofen dose provides analgesia but anti-inflammatory effect requires ≥1600mg/day - regular **Caution:** chronic use can lead to rebound headache; NSAIDS:↑ heart failure & hypertension,↑GI ulcers. ◆non drug treatments (massage, hot/cold therapy, resuming activity, physiotherapy…) are sometimes useful
		◆ASA	C/D	**ASPIRIN**▼**, ANACIN** generics	325-1000mg q4-6h MAX 4g/day **Avoid** in children due to Reyes	5-9 50-100 t	
		◆Ibuprofen	B/D	**ADVIL**▼**, MOTRIN**▼ generics	200-400mg q6-8h MAX OTC 1.2g/d 6mon-12yrs: 5-10mg/kg q6-8h MAX ≤30mg/kg/day OTC	8-10 6-8	
	Codeine available OTC only in combination products (eg.**TYLENOL #1, ATASOL 8**) or ASA (eg. **222s**) in a dose of 8mg codeine /tablet						

COMPLAINT & TREATMENT NOTES	DRUGS OF CHOICE		USUAL DOSE Adult / Pediatrics (Daily MAXIMUM)	$	COMMENTS www.RxFiles.ca OTC Products
ACNE (noninflammatory;papulopustular)[38-40,87,88] Mild – moderate cases treated with OTC preps & non-drug therapy: ◆balanced diet (but food "triggers" do not directly affect acne) ◆wash twice daily (mild soap) ◆wash hair frequently & keep off the face & forehead ◆use oil-free cosmetics ◆control stress factors ◆avoid picking & squeezing lesions to prevent scarring ◆while somewhat useful to cosmetically dry oily skin, avoid **antiseptic** cleansers since ineffective (surface bacteria not causative agent), costly & irritate skin	◆Benzoyl Peroxide (**BP**) 2.5-5% OTC in lotions, creams, gels (>5% products by Rx only) ◆glycolic acid (eg. alpha hydroxy acid) ◆Salicylic Acid (**SA**)- up to 5%	**BENZAGEL**▼ 2.5, 5% lotion and gel (wash and soap also available) **NeoStrata**..., **Reversa**... **ACNEX**▼ **CLEARASIL** **OXY CONTROL** lotion, 1 or 2%	General Directions: ◆begin with water based lotion or cream containing SA ◆apply at HS after washing, increase to BID if needed; wash off in am ◆allow a trial of 6-8wks; if no improvement change to BP 2.5% lotion or cream at hs (can ↑ to BID) ◆if no improvement, increase to BP 5% x 6-8wks; if no improvement, change to gel or consider Rx products: topical antibiotics (eryc & clindamycin), or oral; oral contraceptives (**Tri-cyclen**, **Alesse**, **Diane-35** ✗, **Stieva-A**▼ comedogenic, **Differin**▼ fast onset & less skin irritation but expensive, **Tazorac**▼ effective but skin irritation & expensive, or **Accutane**▼ severe, nodulocystic cases; not if pregnant)	8-15 8-10	◆**BP most effective OTC** agent; ↓sebum production & has both exfoliant & antibacterial effects ◆glycolic acids: ? better than SA with ↓ irritation ◆SA preps less potent exfoliant but still effective for mild cases, less irritating than BP ◆**SE**: all preps cause stinging, reddening, peeling of skin esp. BP; BP can bleach hair & clothing ◆all products: begin @low concentration & ↑ up; potency greatest with: **gels > creams > lotion** ◆**applying to entire affected area more effective** than "spot treating" ◆warn patients they may look **worse before better**; **may take 6-12 weeks for improvement**
Drug induced acne: **anabolic steroids**, azathioprine, bromides, **carbamazepine**, **corticosteroids**, corticotropin, cyclosporine, disulfiram, isoniazid, **lithium**, phenobarbital, **phenytoin**, quinidine, tetracycline & vitamins $B_{1,6,12}$ & D_2.					BP tolerability improved if applied for only 15 min. initially before removing, then double contact time qhs up to 4hrs, then can leave on overnight.
FUNGAL Infections [41-44, 100] **(acute, superficial)** ◆**Athlete's Foot (Tinea pedis)** ◆**Jock Itch (Tinea cruris)** ◆**Ringworm (Tinea corporis)** **Nystatin** – 2nd ary choice as must be applied 3-4x daily; treats yeast (candida, pityrosporum) but not dermatophyte fungi, thus not useful for most cases of jock itch, athlete's foot or ringworm	◆Clotrimazole 1% cream ◆Miconazole 2% cream	**CANESTEN**▼ B **MICATIN**▼ C	Apply BID (am + hs) x 2-6weeks Apply to affected as well as surrounding area. Continue application for at least 1 week after symptoms disappear to ensure eradication (10-14 days preferred)	7-13 8-14	◆keep area clean and dry (use non-scented talc or medicated powder as prophylaxis) ◆do not share towels or personal items ◆improve ventilation of affected area –wear loose clothing, cotton fabrics etc ◆launder affected linens and clothing in hot water; dry in hot dryer or line dry to expose to UV rays ◆foul odor may indicate secondary bacterial infection ◆if recurring tinea (pedis & cruris) → possibly a sign of toenail infection requiring Rx systemic therapy ◆Rx systemic products: **Diflucan**, **Fulvicin U/F**, **Nizoral** ☎▼, **Lamisil** & **Sporanox** ☎▼ may be needed, esp. for non-responsive/non-albicans infections.
Rx: Terbinafine (LAMISIL) 1% cream or 1% spray soln: Apply BID **x1**-2 wks (Max 4wks) $23/30g					
	◆Tolnaftate – slightly less effective,higher recurrence	**TINACTIN**▼ – crm, aerosol, powder U		9-14	
◆**Candidiasis -Vaginal** -Cochrane Review: no difference in effectiveness of oral Rx vs intra-vaginal OTC routes; oral route often preferred by pts.[71] -fluconazole 150mg po weekly effective in ↓ recurrent vaginal candidiasis but expensive & DIs possible [93]	◆Clotrimazole ◆Miconazole	**CANESTEN**▼ 1,3,6 day B **MONISTAT**▼ 1,3,7 day C	Vaginal: Insert one applicatorful or one vag supp at hs x 1-7 days; apply cream to external perineum & vulvar area BID	16-18 14-16	**Vaginal candidiasis** ◆ **1-3 days regimens as effective** as 6-7days with **better compliance**; recurrent resistant cases may need 3-4weeks therapy ◆dietary yogurt (with live culture) or oral bacilli caps may help restore Lactobacilli colonization, but not prevent post-antibiotic vulvovaginitis [94]
Vaginal products: {CANESTEN 3 Combi Pak▼, CANESTEN 1 Combi Pak▼; CANESTEN 3 Cream 2%▼, CANESTEN 6 Cream 1%▼; MONISTAT 3 Dual Pak▼, MONISTAT 7 Dual Pak▼; MONISTAT 7 Vag Supp▼, MONISTAT 3 Vag Supp▼; MONISTAT 2% Cr.▼}					
Diaper – see below; usually secondary infection after 2-3days of general diaper dermatitis (shiny red patches with satellite lesions; can affect folds					
DERMATITIS - **mild-moderate** **Atopic** [45,46] **(eczema)** –unknown cause ◆hydration therapy ◆itch control **Contact**–allergens & irritants (eg. nickel,detergents) ◆acute – cool compress (+/- astringent eg. Buro-Sol solution) ◆chronic – hydration as per atopic **Diaper –** prevention key: ◆change diapers often; keep area clean and dry; ◆disposable diapers with gel often better than cloth ◆avoid baby wipes (irritating) and use wash cloth and water ◆increase air exposure time ◆use protectants as prophylaxis ◆avoid potent corticosteroids!!!	◆Hydrating creams,lotions	Lubriderm, Nutraderm, Moisturel, Sarna-P, Uremol	Apply BID-QID	8-12 (~400ml)	**Non drug treatment:** ◆avoid known triggers, irritants, stress; minimize soap use & hot water contact (bathing, showering) ◆cool room temp with adequate humidity ◆loose cotton clothing; avoid wool & synthetics ◆use laundry soap vs detergent; double rinse cycle or use vinegar in the rinse for diapers; avoid fabric softeners
	◆Colloidal oatmeal preps	**AVEENO BATH**	Use in the bath as directed	8-14	
	◆Petroleum jelly	**VASELINE**; {**PREVEX**▼}		3-5	
	◆Hydrocortisone ½ %	**CORTATE**▼		5-8	
	◆Oral Antihistamines (limited efficacy; 1st gen H1 preferred; **ATARAX**Rx useful for itch, sedation effect); H2's also option	Chlorpheniramine B Diphenhydramine B Cetirizine [24] (:blocks mast cell release) B	See allergy section; **1st gen**: effective for **both** allergic & non allergic rash but sedating give @ hs & thus esp. **useful** for non-allergic rash eg. eczema. **2nd gen**: less useful for non allergic rash but ↓sedation; **useful** for allergic rash eg. hives & bites.	8-12 18 8-10	**Topical corticosteroids** (eg. **CORTATE**): **Use lowest effective potency for as short duration as possible** (Rx strength may be required for flare-ups and acute contact dermatitis; **apply sparingly BID and change to hydrating lubricants once acute symptoms under control**) **Rx products**: topical corticosteroids (Betaderm, Diprosone, Dermovate); non-steroidal anti-inflammatories (Protopic ☎✓, Elidel ☎⊗); antibiotics (Fucidin 2%Cr/Oint, Cloxacillin, Bactroban)
	◆Aluminum acetate (astringent) compresses	**BURO-SOL COMPRESS**▼	If oozing vesicles, apply **BURO-SOL** for 10 minutes 3-4x/day; otherwise cool H2O or saline compresses for 20min 4-6x/day.	10-12	
	◆anti-staphylococcal				
	◆Petroleum jelly	**VASELINE**	**Protectants** should be applied liberally to diaper area with each change; for steroids and antifungals (for candidal cases) – may rub in small amount to affected area, cover with protectant (may alternate between steroid and antifungal rather than mixing together which dilutes both)	3-5	
	◆Baby or talc powder (avoid use of corn starch)				
	◆Zinc Oxide cream, paste	**ZINCOFAX**▼,**PENATEN**		5-10	
	◆Hydrocortisone ½%	**CORTATE**▼		5-8	
	◆Antifungals (clotrimazole,miconazole)	**CANESTEN**▼ B **MICATIN**▼ C		7-10 7-10	

	COMPLAINT & TREATMENT	DRUGS OF CHOICE		USUAL DOSE Adult / Pediatrics	$	COMMENTS
DERM.	**PLANTAR WARTS** [47-49,70] -hard, flat with black pinpoint specks in center ◆20-30% resolve within 6 months without tx and 65% within 2yrs ◆removal desirable often due to pain and to reduce spread of infection Rx: **Cantharone Plus**▼ also an option.	Salicylic Acid (SA) 12-40% ◆gels, collodions, plasters, discs, pads (weaker preps: less pain but require more reapplication)	**COMPOUND W Plus (30% liquid;40% pads)** **DUOFORTE 27% gel**▼ **DUOFILM 40% patch** **SCHOLLS Wart Remover 40% disks**	◆Apply daily @hs (patch & disk q48h) until all warty tissue is removed; Presoak area in warm water, then pare away any overlying kera-toma & dead tissue before applying ◆may take 8-12 weeks for resolution (more concentrated SA preps used by specialists)	10-12 17 20 /14 20	◆Caution: persons with diabetes or circulatory disorders **should not self treat** ◆Rx:Podophyllin&cantharidin **CANTHARONE**▼ effective single application; delayed~24hr pain & blistering ◆Cauterization or freezing with liquid nitrogen faster & more efficacious but often more painful ◆Avoid walking barefoot (eg. in pool area)
		Laser therapy: expensive & sometimes painful. ??Zinc 10mg/kg od ~60d[84] ??Duct tape: 6days on, 12hrs off; repeat x 5-10 cycles may work [66]				
	HEAD LICE (*P. capitis*) [50-51] ◆**Notify & examine all contacts** to prevent a cycle of reinfestation. ◆**Reinfestation prevention**: **nit removal**; bedding, clothing, etc.: wash & dry (with heat), dry clean or seal in plastic bag for ~14 days; vacuum affected rooms; soak combs & brushes in disinfectant solution x 1hr or hot water (65°C for 10min)	◆Permethrin 1% Cream Rinse	**NIX**▼, **KWELLADA-P**▼ B	◆Apply as directed; **MAY repeat in 7d.**	11-14	◆R&C Efficacy: 45% on 1st application; 94% on 2nd ◆**CI**: Permethrin:ragweed or chrysanthemum allergy Pyrethrins: ragweed or chrysanthemum allergy ◆**Lindane: neurotoxicity** -ingestion or excessive use; **CI**:↑ toxicity in young children, elderly, skin disease ◆**Long/thick hair pts** may require 2 x ~50ml bottles ◆**Tea Tree Oil**: lack of evidence; contact dermatitis ◆**SH-206**: a "natural product" lacking data; contains acetic acid, citronella, camphor & sodium lauryl ether sulphate
		Cream Rinse: Apply to washed, towel dried hair. Saturate hair & scalp, wait 10 min, rinse.				
		◆Pyrethrins & Piperonyl Butoxide	**R & C Shampoo**▼ C	◆Apply as directed; **REPEAT in 7 days.**	9	
		Apply & saturate dry hair & scalp, wait 10 min, slowly add water to lather, rinse.				
		◆Lindane 1% Shampoo	Generic ▼ C	◆Apply as directed; **REPEAT in 7 days.**	9	
		Apply-saturate dry hair & scalp, massage x4 min., add H2O slowly - lather, massage x4 min. then rinse.				
		◆ **SH-206** - see comments	**SH-206 Shampoo** U	◆Apply as directed; **REPEAT in 48 hrs.**	10	
VITAMINS & MINERALS	**VITAMINS/SUPPLEMENTS** **In otherwise healthy subjects, supplementation recommended in**: ◆Breast-fed infants -Vitamin D 400IU/d ◆Deficient intake or Malabsorption [81] ◆Pregnancy – calcium, Vit D, **folate**, iron (possible with diet alone) [52] ◆Vegetarians – Ca^{++}, Vit B12, D, Iron? ◆Alcoholic – Vit B's; multivit. (MV) ? ◆Women with heavy menses – Iron ◆Non-milk drinkers – Ca^{++}, Vit D ◆Elderly (esp. if poor diet) – B12, D; MV? ◆if on steroids/phenytoin –Vit D, Ca^{++} ◆HIV –Multivit.(B's,C,E & folic) [91]	**Vitamin Products** Vitamin D_3: **D-VI-SOL** 400 IU/ml ▼ (=10ug cholecalciferol) Children's **CENTRUM JUNIOR**▼ chewable Pregnancy: **MATERNA**▼ Fe++ 27mg; Folic 1mg, **ORIFER F**▼ Fe++ 60mg; Folic 0.8mg; {**Iron/Folic/Vit C**: **PALAFER CF** Fe++ 100mg; Folic 0.5mg} B & C Vitamins: **BEMINAL C FORTIS** ◆ well formulated multivitamins (**MV**) with both regular and age 50+ formulations: -**CENTRUM**; **ONE-A-DAY**; **PARAMETTES** -**house brands:** most retailers have products comparable to brand name at **lower cost**		**RDA** Recommended Daily Allowance in **Adults:** *Fat Soluble Vitamins* *replace if on orlistat* **A** (retinol) – 700♀-900♂ ug (~3000 IU) Beta carotene - 6000 ug (~10000 IU) **D** –200-400 IU; 600 IU if >70yr {2002 CND Osteoporosis Guidelines [6]: 400 IU men & ♀ <50yr; 800 IU if >50yrs} **D3 (cholecalciferol) preferable to D2 (ergocalciferol)** **E** –22 IU (15mg) *RRR*-α-tocopherol natural {= 67 IU (30mg) of all-rac-α-tocoferol synthetic } [1] *Water Soluble Vitamins* **B1** (thiamine) ~1.2 mg **B2** (riboflavin) ~1.3 mg **B3** (niacin) ~15 mg **B6** (pyridoxine) ~1.5 mg replace if on isoniazid **B12** (cyanocobalamine) 2.4 ug Replace if no terminal ileum {OTC: CENTRUM SELECT contains 25ug▼; Rx: 100▼ & 1200 ug tab [89]} **C** (ascorbic acid) 75-90 mg **Folic Acid** 400 ug Replace if on methotrexate & phenytoin (cereal grains also fortified in Canada) **Pantothenic acid** 5 mg *Minerals* **Fe^{++}** 8 mg (men & ♀ post menopausal) 18 mg (women <50yrs) {Treatment: 2-3mg/kg/day e.g. Ferrous Sulfate 300mg (=60mg Fe^{++}) po BID-TID} **Ca^{++}** 1000 mg (adults); 1500 mg for postmenopausal ♀ & ♂ >50yrs [6] **Mg^{++}** 310-420 mg **Zn^{+}** 8-11 mg (evidence inconclusive in common cold [75], ? eye benefit [85])	15 8-12 15-20 Vit B&C 8-12 /60 tab Multivite 10-12 /3 month Fe^{++} 5-10 / 60 tab 12-15 for 30 tab SR products Ca^{++} 5-12 /100tab Multivite 10-12 /3 month	**GENERAL SUPPLEMENTATION** ◆vitamins not a substitute for healthy diet ◆NO proven benefit to "mega dose" supplements unless true deficiency; excess water soluble vitamins (Bs & C) are lost in the urine, while fat-soluble (A,D,K) can accumulate ⇨toxicity. Also - ↑↑ Vit A:↑lung ca in smokers[78,96] & may ↑ fracture risk[80,95] **ANTI-OXIDANTS:** no proven heart benefit from recent studies for supplemental Vitamin E, C, beta-Carotene & Selenium [53,54,90] **;** Vitamin E in Alzheimer's limited evidence [67,68,79] & may even impair possible statin benefit [69]; nicotinamide not prevent diabetes [83]; some evidence that ***dietary sources*** of antioxidants may decrease heart risk. Supplements may increase all cause mortality. [97,98] **IRON** ◆Iron best on an **empty** stomach (or HS) but GI irritation common so OK to take with food but absorption reduced by 50% (Vit. C ↑ absorption) ◆SR and enteric products may cause less GI irritation but expensive and poorly absorbed ◆continue ~3 months to replace iron stores **CALCIUM** ◆can only absorb ~500mg of Ca^{++} at one time so best to **split doses** (ie. 1 tab BID); ◆calcium carbonate better **with food** so take with meals (if necessary one dose at bedtime is acceptable) ◆Citrate form – ↑↑ absorption if achlorhydria ◆if a natural source calcium product is desired, use a reputable brand name product as lead contamination can be a problem (particularly with off-shore health food products)
	IRON (Fe^{++}) SUPPLEMENTS ◆iron products: use on Dr's advice ◆amount of iron in multivitamins OK for chronic daily use; breast-fed infants ≥6mo require Fe^{++} (cereals or supplement)	**Ferrous sulfate**▼ (300mg tab = **60**mg Fe^{++}) **Fer-in-Sol** drops ▼ ~$20 (75mg/ml = 15mg Fe^{++}) Ferrous sulfate syrup▼ (30mg/ml = 6mg Fe^{++}) **Ferrous gluconate**▼ (300mg tab = **35**mg Fe^{++}) **Ferrous fumarate**▼ (300mg tab = **99**mg Fe^{++})					
	CALCIUM & VITAMIN D ◆adequate intake important throughout life (consider age, bisphosphonates, etc.) ◆vitamin D essential for Ca^{++} absorption & utilization; deficient in most North Americans due to ↓ sun [62] ◆magnesium supplements not required as deficiency rare (dietary intake provides sufficient); no proven clinical benefit on bone but laxative effect may counteract constipating effect of Ca^{++} ◆excess Vit A causes bone loss and interferes with Vit D	◆**Calcium carbonate** least expensive & highest percentage of available elemental Ca++: - calcium **carbonate**▼ = **40%** elemental Ca^{++} e.g. **OSCAL**▼ (1250mg = 500mg elemental Ca^{++}) **TUMS** chew (Reg=200mg, Extra=300mg, Ultra=400mg Ca^{++}) - calcium **citrate** = **21%** elemental Ca^{++} - calcium **lactate** = **13%** elemental Ca^{++} - calcium **gluconate** = **9%** elemental Ca^{++} ◆**General multivitamin** good economical source of **vitamin D** (most have 400 IU/tablet) ◆**Milk:** 1 cup = 300mg Ca^{++} & 100 IU Vit D 30g cheese = 200mg Ca^{++}; Tofu 120g = 150mg Ca^{++}				

=↓ dose for renal dysfx ♀=female ✗ =non formulary in Sask. ☎=EDS ▼ = covered by NIHB
BP=blood pressure **COPD**=chronic obstructive pulmonary disease **CI**=contraindication **d**=days **DI**=drug interaction **Dx**=disease **GERD**=gastroesophageal reflux disease **h**=hours **hs**=bedtime **Rx**=prescription **SE**=side effect **SR**=sustained release **tsp**=teaspoon~5ml **tbsp**=tablespoon~15ml **tx**=treatment **wk**=weeks **yr**=year; **c**=scored; **Cost Range**: low-end price - generic or smaller size

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Additional Pediatric Dosing Information for Physicians & Pharmacists (from 2003-2004 Formulary – The Hospital for Sick Children (Toronto, Canada)

Aluminum & Magnesium Hydroxide	infant	2.5-5ml po q1-2h
	child	5-15ml po after meals & qhs
Bisacodyl		0.3mg/kg/dose po 6-12h before desired effect
Dextromethorphan		1mg/kg/day
Dimenhydrinate		5mg/kg/day po/IV/IM/pr (÷ q6h)
Diphenhydramine		5mg/kg/day po/IV/IM (÷ q6h)
Docusate Sodium		5mg/kg/day po (÷ q6-8h or single daily dose)
Iron – Treatment		6mg Fe++/kg/day po OD (or ÷ TID)
Iron – Prophylaxis		0.5-2mg Fe++/kg/day given OD (or ÷BID-TID)
Lactulose - for Constipation		5-10ml/day po OD (double daily dose till stool produced)
Mineral Oil (Heavy)		1ml/kg/dose po HS (Avoid in <1 yr old)
Magnesium Hydroxide (MgOH) 80mg/ml (33mg elemental Magnesium/ml)		20-40 mg elemental Magnesium/kg/day po (÷ TID) –for treatment of hypomagnesemia
Pseudoephedrine:	<2yrs	4mg/kg/day (÷ q6h prn)
Ranitidine – Treatment		5-8mg/kg/day po ÷ q12h x8 weeks
Ranitidine – Maintenance		2.5-5mg/kg/day given OD
Senna Syrup	2-5yrs	3-5ml/dose qhs
	6-12yrs	5-10ml/dose qhs
Senna Tablet	6-12yrs	1-2 tablets/dose po qhs
Sorbitol Syrup 70%		1.5-2ml/kg/dose po (Max 150ml/dose)

Taste of some medications – MgOH, docusate, lactulose - may be masked by giving with milk (chocolate mix), juice or infant formula.