

Endorsing & Supporting Organizations

Endorsing Organizations

American Academy of Pediatrics, California District
 American Academy of Urgent Care Medicine
 Association of California Nurse Leaders
 California Academy of Family Physicians
 California Academy of Physician Assistants
 California Association of Nurse Practitioners
 California Pharmacists Association
 California Society of Health-System Pharmacists
 Urgent Care Association of America

Supporting Organizations

Aetna Health of California
 Blue Cross of California
 Blue Shield of California
 CalOptima
 Care 1st Health Plan
 Health Net of California
 Health Plan of San Joaquin
 Inland Empire Health Plan
 Kaiser Permanente
 LA Care Health Plan
 Molina Healthcare
 National Medical Health Card Systems, Inc.
 Santa Barbara Regional Health Authority

Over-the-Counter and Self Care for Viral Infections

Antibiotic treatment does not cure viral infections. Antibiotics can be harmful if they are given when not needed. The treatments recommended below will help your patient feel better while their body's own defenses are defeating the virus.

The medicines below can be used according to the package instructions, or as directed by a healthcare provider.

Symptoms	Home Remedies	Over-the-Counter Generic Name & Brand Name Examples
Fever, Aches and Pain	<ul style="list-style-type: none"> Sponge bath Cool compress Bed rest Heating pad on sore muscles 	Analgesics <ul style="list-style-type: none"> Acetaminophen (Infant's Tylenol, Children's Tylenol) Ibuprofen (Infant's Motrin, Children's Motrin, Advil, Nuprin) Naproxen (Aleve)
Cough or Sore Throat	<ul style="list-style-type: none"> Drink more fluids Room humidifier Gargle (warm salt water) 	Expectorant <ul style="list-style-type: none"> Guaifenesin (Robitussin Chest Congestion, Children's Mucinex) Antitussives <ul style="list-style-type: none"> Dextromethorphan (Delsym, Robitussin Pediatric Cough, Pediacare Infant Drops and Long acting Cough) Combination Products <ul style="list-style-type: none"> Robitussin Cough & Cold Pediatric Drops Pediacare Infant Drops Decongestant & Cough Children's Dimetapp Cold & Allergy
Stuffy or Runny Nose	<ul style="list-style-type: none"> Steam inhalation Saline nose drops or spray For red, raw nose, dab on petroleum jelly or salve or use tissues with lotion 	Decongestants <ul style="list-style-type: none"> Pseudoephedrine (Pediacare Infant Drops, Children's Sudafed) Oxymetazoline (Afrin) Phenylephrine (Neo-Synephrine) Antihistamines <ul style="list-style-type: none"> Diphenhydramine (Children's Benadryl) Chlorpheniramine (Chlor-Trimeton) Loratadine (Dimetapp ND, Alavert, Claritin) Clemastine (Tavist Allergy)

Antiviral Therapies for Influenza

For children over one year of age, oseltamivir and zanamivir may be given within 48 hours of the onset of flu symptoms and can reduce the duration of uncomplicated influenza A and influenza B.

This compendium was designed to summarize appropriate antibiotic treatment of common pediatric outpatient infections. It is based on guidelines and recommendations from leading medical experts and professional organizations in the US.

This guideline summary is updated annually.

Reference Articles

Otitis Media:

1. Ganiats, T., et. al., Diagnosis and Management of Acute Otitis Media. PEDIATRICS, 2004; 113: 1451-1465. CLINICAL PRACTICE GUIDELINE.

Acute Bacterial Sinusitis:

1. The Sinus and Allergy Health Partnership. Antimicrobial Treatment Guidelines for Acute Bacterial Rhinosinusitis. Executive Summary. SUPPLEMENT OTOLARYNGOLOGY-HEAD AND NECK SURGERY, 2004; 130: 1-45.

2. Piccirillo, JF., Clinical Practice. Acute Bacterial Sinusitis. N ENGL J MED. 2004 Aug 26; 351 (9): 902-10.

3. Subcommittee on Management of Sinusitis and Committee on Quality Improvement, Clinical Practice Guideline: Management of Sinusitis. PEDIATRICS, 2001; 108: 798-808.

4. O'Brien, K., et. al., Acute Sinusitis – Principles of Judicious Use of Antimicrobial Agents. PEDIATRICS, 1998, 101: 174-177.

Pharyngitis:

1. Linder J., et. al., Antibiotic Treatment in Children With Sore Throat. JAMA, November 9, 2005; 294: 2315-2322.

2. Institute for Clinical Systems Improvement. Acute Pharyngitis Health Care Guideline. Executive Summary. www.ICSI.org. May 2005.

3. Schwartz, B., et. al., Pharyngitis – Principles of Judicious Use of Antimicrobial Agents. PEDIATRICS, 1998; 101: 171-174.

Nonspecific Cough Illness/Bronchitis:

1. O'Brien, K., et. al., Cough Illness/Bronchitis Principles of Judicious Use of Antimicrobial Agents. PEDIATRICS, 1998; 101: 178-181.

Bronchiolitis/NonSpecific URI:

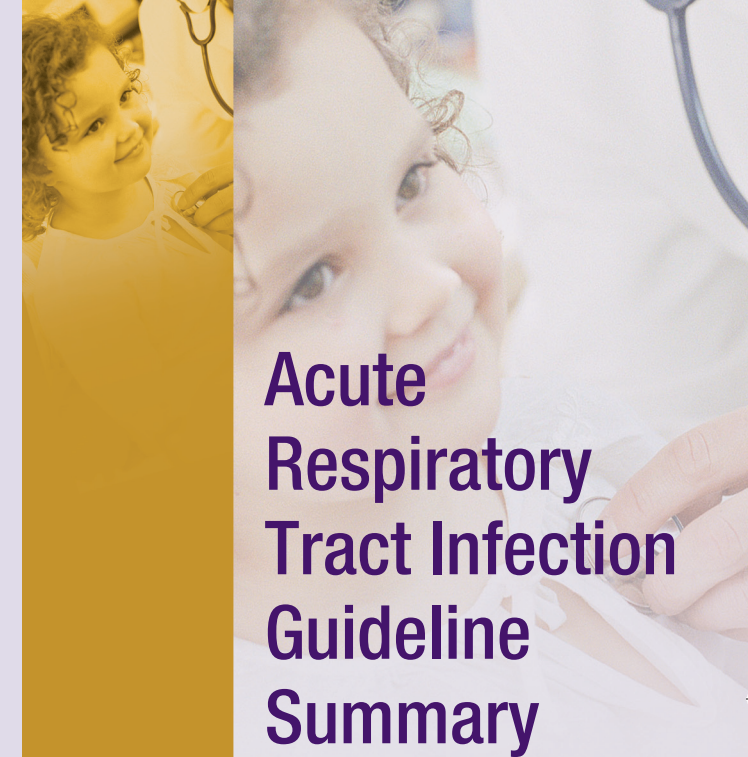
1. Colgan, R., Appropriate Antimicrobial Prescribing: Approaches that Limit Antibiotic Resistance. AMERICAN FAMILY PHYSICIAN, 2001; 64: 999-1004.

2. Dowell, S., et. al., Appropriate Use of Antibiotics for URIs in Children: Part II. Cough, Pharyngitis and the Common Cold. AMERICAN FAMILY PHYSICIAN, 1998; 58: 1335-1342.

3. Dowell, S., et. al., Principles of Judicious Use of Antimicrobial Agents for Pediatric Upper Respiratory Tract Infections. PEDIATRICS, 1998; 101: 163-165.

For more information visit: www.aware.md

2006/07 PEDIATRICS



Acute Respiratory Tract Infection Guideline Summary

Developed as part of the Alliance Working for Antibiotic Resistance Education (AWARE) Project.

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CMA Foundation AWARE Project Pediatric Clinical Practice Guidelines Compendium Summary

Illness	Indications for Antibiotic Treatment	Pathogen	Antimicrobial Therapy	Antibiotic	Organizational Guidelines Reviewed
Otitis Media	<p>When to Treat with an Antibiotic - Acute Otitis Media:</p> <ol style="list-style-type: none"> Recent, usually abrupt, onset of signs and symptoms of middle-ear inflammation and effusion AND Presence of middle-ear effusion that is indicated by any of the following: <ol style="list-style-type: none"> Bulging of the tympanic membrane Limited or absent mobility of tympanic membrane Air fluid level behind the tympanic membrane Otorrhea AND Signs or symptoms of middle-ear inflammation as indicated by either: <ol style="list-style-type: none"> Distinct erythema of the tympanic membrane OR Distinct otalgia [discomfort clearly referable to the ear(s) that interferes with or precludes normal activity or sleep] <p>When Not to Treat with an Antibiotic: Otitis Media with Effusion.</p>	<p><i>Streptococcus pneumoniae</i></p> <p>nontypeable <i>Haemophilus influenzae</i></p> <p><i>Moraxella catarrhalis</i></p>	<p>Age Group:</p> <ol style="list-style-type: none"> < 6 mo: antibiotics 6 mo - 2 yrs: antibiotics if diagnosis certain; antibiotics if diagnosis uncertain and severe illness > 2 yrs: antibiotics if diagnosis certain and severe illness <p>Analgesics & Antipyretics: Always assess pain. If pain is present, treatment to reduce pain <i>Oral:</i> ibuprofen/acetaminophen (may use acetaminophen with codeine for moderate-severe pain) <i>Topical:</i> Benzocaine.</p>	<p>1st Line:</p> <ul style="list-style-type: none"> High dose amoxicillin (80-90 mg/kg/day) High dose amoxicillin/clavulanate (80-90 mg/kg/day of amoxicillin component) if severe illness or additional coverage desired <p>Alternatives: Non-anaphylactic penicillin-allergic</p> <ul style="list-style-type: none"> Cefdinir, cefpodoxime, or cefuroxime <p>Severe penicillin allergy</p> <ul style="list-style-type: none"> Azithromycin or clarithromycin <p>Unable to tolerate p.o. antibiotic</p> <ul style="list-style-type: none"> Ceftriaxone 	<p>American Academy of Pediatrics (AAP)</p> <p>Centers for Disease Control and Prevention (CDC)</p> <p>American Academy of Family Physicians (AAFP)</p>
Acute Bacterial Sinusitis	<p>When to Treat with an Antibiotic: Diagnosis of acute bacterial sinusitis may be made with symptoms of viral URI (nasal discharge or daytime cough not improved after 10 days, severe illness with fever, purulent nasal discharge, facial pain) not improving after 10 days or worse after 5-7 days.</p> <p>Diagnosis may include some or all of the following symptoms or signs: Nasal drainage, nasal congestion, facial pressure/pain (especially when unilateral and focused in the region of a particular sinus), postnasal discharge, anosmia, fever, cough, maxillary dental pain, ear pressure/fullness. Less frequent signs and symptoms include hyposmia and fatigue, in conjunction with some or all of the above.</p> <p>When Not to Treat with an Antibiotic: Nearly all cases of acute bacterial sinusitis resolve without antibiotics. Antibiotic use should be reserved for moderate symptoms not improving after 10 days, or that are worsening after 5-7 days, and severe symptoms.</p>	<p><i>Streptococcus pneumoniae</i></p> <p>nontypeable <i>Haemophilus influenzae</i></p> <p><i>Moraxella catarrhalis</i></p> <p>Mainly viral pathogens</p>	<p>Usual Antibiotic Duration: 10 to 14 days</p> <p>Failure to respond after 72 hours of antibiotics: Reevaluate patient and switch to alternate antibiotic. Fiberoptic endoscopy or sinus aspiration for culture may be necessary for work up. Consider anti-inflammatory or decongestive therapy.</p>	<p>1st Line:</p> <ul style="list-style-type: none"> Amoxicillin (80-90 mg/kg/day) <p>Alternatives:</p> <ul style="list-style-type: none"> Amoxicillin-clavulanate (80-90 mg/kg/day of amoxicillin component) Cefpodoxime Cefuroxime Cefdinir Ceftriaxone <p>For β-Lactam Allergy:</p> <ul style="list-style-type: none"> Trimethoprim-sulfamethoxazole Macrolides Clindamycin 	<p>AAP AAFP CDC</p> <p>Sinus and Allergy Health Partnership (SAHP)</p>
Pharyngitis	<p>When to Treat with an Antibiotic: <i>Streptococcus pyogenes</i> (Group A Strep): Symptoms and signs: sore throat, fever, headache, nausea, vomiting, abdominal pain, tonsillopharyngeal erythema, exudates, palatal petechiae, tender enlarged anterior cervical lymph nodes. Confirm diagnosis with throat culture or rapid antigen detection; negative rapid antigen detection tests should be confirmed with throat culture.</p> <p>When Not to Treat with an Antibiotic: Respiratory viral causes: conjunctivitis, cough, rhinorrhea, diarrhea uncommon with Group A Strep.</p>	<p><i>Streptococcus pyogenes</i></p> <p>Routine respiratory viruses</p>	<p>Group A Strep: Treatment reserved for patients with positive rapid antigen detection or throat culture.</p> <p>Antibiotic Duration: 10 days.</p>	<p>1st Line:</p> <ul style="list-style-type: none"> Penicillin V Benzathine penicillin G <p>Alternatives:</p> <ul style="list-style-type: none"> Amoxicillin Oral cephalosporins Clindamycin Macrolides <p>For β-Lactam Allergy:</p> <ul style="list-style-type: none"> Erythromycin 	<p>AAP AAFP CDC</p> <p>Infectious Diseases Society of America (IDSA)</p> <p>Institute for Clinical Systems Improvement (ICSI)</p>
Nonspecific Cough Illness/ Bronchitis	<p>When to Treat with an Antibiotic: Presents with prolonged, unimproving cough (14 days). Clinically differentiate from pneumonia. Pertussis should be reported to public health authorities. <i>Chlamydomphila pneumoniae</i> and <i>Mycoplasma pneumoniae</i> may occur in older children (unusual < 5 years of age).</p> <p>When Not to Treat with an Antibiotic: Nonspecific cough illness.</p>	<p>> 90% of cases caused by routine respiratory viruses. < 10% of cases caused by <i>Bordetella pertussis</i>, <i>Chlamydomphila pneumoniae</i>, or <i>Mycoplasma pneumoniae</i>.</p>	<p>Treatment reserved for <i>Bordetella pertussis</i>, <i>Chlamydomphila pneumoniae</i>, <i>Mycoplasma pneumoniae</i>.</p>	<ul style="list-style-type: none"> Macrolides Tetracyclines for children \geq 8 years of age) 	<p>AAP AAFP CDC</p>
Bronchiolitis/ Nonspecific URI	<p>When Not to Treat with an Antibiotic: Sore throat, sneezing, mild cough, fever (generally < 102 F, < 3 days), rhinorrhea, nasal congestion; self-limited (typically 5-14 days).</p>	<p>> 200 viruses, including rhinoviruses, coronaviruses, adenoviruses, respiratory syncytial virus, enteroviruses (coxsackieviruses & echoviruses), influenza viruses & parainfluenza viruses.</p>	<p>Assure adequate fluid intake. May advise rest, OTC medications, humidifier. See Back Panel</p>	<ul style="list-style-type: none"> None 	<p>AAP AAFP CDC ICSI</p>

This guideline summary is intended for physicians and healthcare professionals to consider in managing the care of their patients for acute respiratory tract infections. While the summary describes recommended courses of intervention, it is not intended as a substitute for the advice of a physician or other knowledgeable healthcare professional. These guidelines represent best clinical practice at the time of publication, but practice standards may change as more knowledge is gained.