Neighborhood Health Plan of Rhode Island	
Section: Clinical Practice Guideline	**Subject:** Judicious Use of Antibiotics for Pediatric Upper Respiratory Infections
Adopted: October 15, 2001	**Revised:** November 13, 2003, October 13, 2005 September 2007 October 2009 September 2011

Illness	**Definition**	**Antibiotic Therapy –**	**Type of Antibiotics, if applicable**	**Comments**
Acute Otitis Media (AOM)	A certain diagnosis of AOM meets three criteria -Presence of fluid in the middle ear in association with -acute onset of signs and symptoms of local or systemic illness (fever, pain etc) -signs or symptoms of middle-ear inflammation	Age Group: - <6 months: antibiotics - 6 months to two years: Antibacterial therapy if severe illness; observation option* if nonsevere illness - ≥ 2 years: antibiotics if severe illness ; observation option if non severe	1st Line: High Dose Amoxicillin (80-90 mg/kg /day) BID or TID For those who had been treated initially with amoxicillin and did not improve, high-dose amoxicillin-clavulanate (80-90 mg/kg per day of amoxicillin component, with 6.4 mg/kg per day of clavulanate in 2 divided doses) should be used Cephalosporin or macrolides is an alternative in case of penicillin allergy	*The "observation option" for AOM refers to deferring antibacterial treatment of selected children for 48 to 72 hours and limiting management to symptomatic relief. The decision to observe or treat is based on the child's age, diagnostic certainty, and illness severity. To observe a child without initial antibacterial therapy, it is important that the parent/caregiver has a ready means of communicating with the clinician.
Acute bacterial sinusitis	Prolonged nonspecific upper respiratory signs and symptoms, such as rhinorrhea and cough without improvement for >10 to 14 days or longer, or more severe upper respiratory tract signs and symptoms, such as fever higher than 39.0°C (102.2°F), facial swelling and facial pain of any duration.	Initial antibiotic treatment of acute sinusitis should be with the most-narrow—spectrum agent which is active against the pathogens. Antibiotic use should be reserved for moderate symptoms not improving after 10 days or that are worsening after 5-7 days and severe symptoms.	1st Line: Pediatric: Amoxicillin 80-90 mg/kg/d PO divided bid/tid Pediatric high dose: 90 mg/kg/d PO divided bid; (consider in children in large day care settings).. Typically, uncomplicated cases of acute sinusitis are responsive to amoxicillin.. For children allergic to penicillin, a second- or third-generation cephalosporin can be used (only if the allergic reaction is not a type 1 hyper sensitivity reaction). In cases of serious allergic reaction, a macrolide or clindamycin can be used.	**When not to treat with an antibiotic:** Nearly all cases of mild acute bacterial sinusitis resolve without antibiotics.

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Pharyngitis (tonsillitis)	Diagnosis of Group A Strep must be made on results of throat culture or antigen-detection ("rapid strep") test with culture backup for negative screen.	Group A streptococcus Treatment reserved for patients with positive rapid antigen detection or throat culture. Initiation of antibiotic treatment pending throat culture results may be appropriate only in particular settings when the likelihood of streptococcal pharyngitis is high (child over 3 with fever, tonsillar exudate and anterior cervical lymphadenopathy in the absence of upper respiratory symptoms) and an effort is made to discontinue treatment upon receipt of a negative culture result.	1st Line: Pencillin V Macrolides are an acceptable alternative for penicillin-allergic patients Amoxicillin is preferred when concurrent otitis media or sinusitis is being treated. Usual duration of antibiotic therapy is 10 days for prevention of rheumatic fever	**When not to treat with an antibiotic**: Respiratory viral causes; conjunctivitis, cough, rhinorrhea, and/or diarrhea are uncommon with Group A Strep Most episodes of sore throats, particularly in children under 3 years of age, are caused by viral agents.
Non-specific Cough Illness/Bronchitis	Principally caused by viral pathogens. Airway inflammation and sputum production are non-specific responses and do not imply a bacterial etiology.	Consider antibiotics only for suspected pneumonia, based on fever with focal exam, infiltrate on chest x-ray , tachypnea or toxic appearance. Prolonged cough (>10 -14 days without improvement) may suggest specific illnesses (e.g. sinusitis) that warrant antibiotic treatment. .	Treatment with a macrolide may be warranted in the child when mycoplasma or pertussis is warranted.	**When not to treat with an antibiotic:** Cough < 10 -14 days in well-appearing child without physical signs of pneumonia
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Non-Specific URI/Common Cold/ Viral Rhinosinusitis	This acute illness typically is characterized by rhinorrhea, sore throat, cough and fever.	Antibiotics do not effectively treat URI or prevent subsequent bacterial infections	Not indicated	Mucous may change from yellow to green but this is not an indication of bacterial infection. In uncomplicated colds, cough and nasal discharge may persist for 14 days or more, long after other symptoms have resolved.

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***The following are medication recommendations for the treatment of the above listed conditions. Some of the medications may not be on Neighborhood's formulary and may require a Prior Authorization. Prior authorization is required due to RI Medicaid pharmacy benefits and Neighborhood's formulary management.**

References:

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- Emedicine.medscape.com: Pediatric Sinusitis, Medical Treatment
- CMA Foundation AWARE Project : Pediatric Clinical Practice Guidelines Compendium Summary; www.aafp.org/afp; Volume 74, Number 6; September 15, 2006
- AMA: American Medical Association 2006/07 Pediatrics : Acute Respiratory Tract Infection Guideline Summary
- CDC: Centers For Disease Control (http://www.cdc.gov/drugresistance/community/healthcare_provider.htm#2a);
- Pediatrics; Official Journal of the American Academy of Pediatrics, Pediatrics Vol. 101 No. 1 Supplement 1998,
- AHRQ – Agency for Healthcare Research and Quality, National Guideline Clearinghouse