

# UPPER RESPIRATORY INFECTIONS and PNEUMONIA

Proposed Management of Allergic Rhinitis on Medical Missions in Resource-Limited Settings

#### Case definition

#### Pneumonia in children:

- 1. *Tachypnea* with calm respiratory rate (RR)>60 (age <2 months), RR>50 (if age 2-12 months), RR>40 (if age 12 months to 5 years)
- 2. Two of: chest pain, rales, fever at triage, O2 saturation <97%
- 3. O2 saturation <92%

#### Pneumonia in adults:

Acute onset productive cough PLUS

- 1. Any abnormal vital sign (temperature >38C, HR >100, RR >20, O2 saturation <95%)
- 2. Pneumonia score >0 based on: All day sputum production (1), myalgias (1), night sweats (1), sore throat (-1), rhinorrhea (-2)

*URI:* Rhinorrhea, sneezing, low grade fever WITHOUT rapid breathing or respiratory distress *Sinusitis*: Head congestion, facial pain, and purulent nasal discharge that progresses to productive cough. Suspect bacterial infection if worsening after 7-14 days

*Pharyngitis*: Sore throat with tender, enlarged lymph nodes

Acute bronchitis: Productive cough, fever, and rhonchi persisting for up to 14 days

Consider hospital referral for the following symptoms:

- 1. ANY pneumonia, fever, or wheeze in child <2 months
- 2. Child with pneunonia who is either: unable to drink at all (if age 2 months to 5 years) OR taking less than half of usual milk intake (if age <2 months) OR malnourished (any age)
- 3. First wheeze with respiratory distress OR chest indrawing and distress with child lying flat in mother's lap at rest (age 2-5 years)
- 4. Rest stridor
- 5. Unusually sleepy
- 6. Nasal flaring, grunting, or cyanosis

#### Clinical management

- 1. Nutrient and energy rich foods, including cereals, vegetables, meat or fish, and dairy products or eggs if available
- 2. Add vegetable oil to increase energy content of food
- 3. Encourage breastfeeding
- 4. Clear blocked nose using soft cloth, or apply saline nasal drops using moistened wick
- 5. Encourage fluids, tea, or hot water with honey (except children <12 months)
- 6. Hygiene practices to reduce transmission

*Pharyngitis*: Rapid strep or mono spot test if exudative Antibiotics only if strep test positive or signs of bacterial infection

### Pharmacologic management

Acetaminophen or NSAIDs for fever Decongestants, antihistamine cough syrup

#### Antibiotic therapy

First line:

Amoxicillin (for sinusitis and pharyngitis)

Macrolide (for pneumonia and acute bronchitis) or TMP-SMX (pediatrics)

May add albuterol inhaler PRN

Second line: Macrolide (for sinusitis and pharyngitis)

## Adapted from:

The management of acute respiratory infections in children: Practical guidelines for outpatient care. 1995. World Health Organization.

Pisarak, P and Montoya, C. When should a chest xray be used to evaluate acute onset productive cough in adults? Journal of Family Practice.