



Amoxicillin

Amoxicillin

- Brand Names:

- Amoxil
- Trimox
- Wymox
- Polymox



- Therapeutic Category:

- Antibacterial
 - Aminopenicillin

Amoxicillin



■ Accepted Indications:

- The aminopenicillins have activity against
 - *H. influenzae*
 - *E. coli*
 - *P. mirabilis*
 - *Salmonella*
 - some *Shigella* species
 - also retain activity against penicillin-sensitive gram-positive bacteria.
- Bacterial exacerbations of bronchitis
- Uncomplicated endocervical and urethral gonorrhea
- Acute otitis media
- Bacterial pharyngitis
- Bacterial pneumonia
- Sinusitis
- Duodenal ulcer associated with *Helicobacter pylori*
 - Indicated as part of a triple antibiotic therapy (in combination with clarithromycin and lansoprazole) and as part of a dual antibiotic therapy (in combination with lansoprazole)
- Bacterial urinary tract infections



Amoxicillin

- Side Effects:

- Those indicating need for medical attention:

- Allergic reactions
 - Specifically anaphylaxis, exfoliative dermatitis, skin rash, hives, or itching
 - Clostridium difficile colitis
 - Hepatotoxicity
 - Interstitial nephritis
 - Leukopenia or neutropenia
 - Mental disturbances
 - Pain at site of injection
 - Platelet dysfunction or thrombocytopenia
 - Seizures



Amoxicillin

- Side Effects (cont.):
 - Those indicating need for medical attention only if they continue or are bothersome:
 - Gastrointestinal reactions
 - Headache
 - Oral candidiasis
 - Vaginal candidiasis

Amoxicillin



■ Dosing Regimen:

□ Capsules, Tablets and Chewable Tablets

■ Antibacterial

- Ear, nose, and throat, skin, and genitourinary tract infections:
 - Mild or moderate — 500 mg every 12 hours or 250 mg every 8 hours
 - Severe — 875 mg every 12 hours or 500 mg every 8 hours
- Lower respiratory tract infections:
 - 875 mg every 12 hours or 500 mg every 8 hours
- Gonorrhea, acute uncomplicated (anogenital and urethral infections)
 - 3 grams as a single dose
- Bacterial endocarditis (prophylaxis)
 - 3 grams 1 hour before the procedure, then 1.5 grams 6 hours after the initial dose
- Duodenal ulcer, *H. pylori* - associated:
 - Triple antibiotic therapy: 1000 mg amoxicillin with 500 mg clarithromycin and 30 mg lansoprazole two times a day at twelve-hour intervals for 14 days
 - Dual antibiotic therapy: 1000 mg amoxicillin with 30 mg lansoprazole three times a day at 8-hour intervals for 14 days

Amoxicillin



- Dosing Regimen (cont.):
 - Oral Suspension
 - Usual pediatric dose
 - Neonates and infants up to 3 months of age:
 - Not more than 30 mg/kg per day in divided doses every 12 hours
 - Infants 3 months of age and older and children weighing less than 40 kg:
 - Ear, nose, and throat, skin, and genitourinary tract infections — 20-40 mg/kg of body weight per day in divided doses every 8 hours or 25-45 mg/kg of body weight per day in divided doses every 12 hours
 - Lower respiratory tract infections — 40 mg/kg of body weight per day in divided doses every 8 hours
 - Gonorrhea — 50 mg/kg of body weight as a single dose with probenecid
 - Children 40 kg and over— See usual adult dose
 - Usual adult prescribing limits
 - 4.5 grams a day



Amoxicillin

- Auxiliary Labels:

- Capsules and Tablets

- Continue medication for full time of treatment

- Oral Suspension

- Refrigerate

- Shake well

- Continue medication for full time of treatment

- Beyond-use date

- Take by mouth only (pediatric drops)

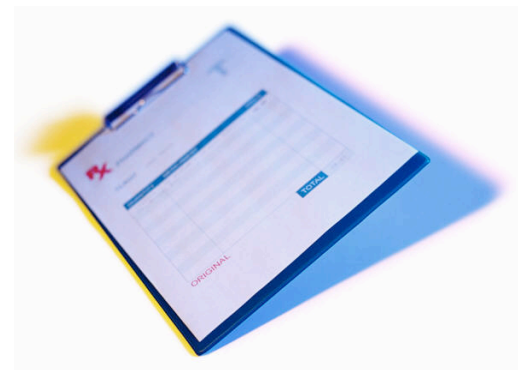
- Chewable Tablets

- Should be chewed or crushed

- Continue medication for full time of treatment

Amoxicillin

- Monitoring Parameters: (major clinical significance)
 - Stool cytotoxin assays (if *Clostridium difficile* colitis occurs)



Amoxicillin



■ Available Dosage Forms:

- 250 mg capsules
 - Amoxil, Trimox, Wymox, generic
- 500 mg capsules
 - Amoxil, Trimox, Wymox, generic

- 50 mg per mL oral suspension
 - Amoxil, Trimox, Polymox
- 125 mg per mL oral suspension
 - Amoxil, Polymox, Trimox, Wymox, generic
- 200 mg per mL oral suspension
 - Amoxil
- 250 mg per mL oral suspension
 - Amoxil, Polymox, Trimox, Wymox, generic
- 400 mg per mL oral suspension
 - Amoxil



- 500 mg tablets
 - Amoxil
- 875 mg tablets
 - Amoxil

- 125 mg chewable tablets
 - Amoxil
- 200 mg chewable tablets
 - Amoxil
- 250 mg chewable tablets
 - Amoxil, generic
- 400 mg chewable tablets
 - Amoxil





Amoxicillin

- **Contraindications:**
 - Allergy to penicillins
- **Pregnancy Category B**

Amoxicillin

- Drug Interactions: (major clinical significance)
 - Aminoglycosides
 - Estrogen-containing oral contraceptives
 - Methotrexate
 - Probenecid



Amoxicillin



■ Patient Consultation:

□ Before using this medication

■ Conditions affecting use, especially:

- Allergy to penicillins or cephalosporins
- Pregnancy — Amoxicillin crosses the placenta
- Breast-feeding — Amoxicillin is distributed into breast milk
- Other medical problems, especially a history of bleeding disorders; congestive heart failure; cystic fibrosis; active or history of gastrointestinal disease, especially antibiotic-associated colitis; infectious mononucleosis; phenylketonuria; or renal function impairment

□ Proper use of this medication

■ Suspension:

- Take straight or mixed with formulas, milk, fruit juice, water, ginger ale, or other cold drinks
- Take immediately after mixing
- Drinking full dose
- Proper administration technique
- Not using after expiration date
- Compliance with full course of therapy
- Importance of not missing doses and taking at evenly spaced times

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- Patient Consultation (cont.):
 - Precautions while using this medication
 - Checking with physician if no improvement within a few days
 - For severe diarrhea, checking with physician before taking any antidiarrheals
 - Possibly using an alternate or additional method of contraception if taking estrogen-containing oral contraceptives concurrently
 - Side/adverse effects
 - Signs of potential side effects, especially allergic reactions, *Clostridium difficile* colitis, hepatotoxicity, interstitial nephritis, leukopenia or neutropenia, mental disturbances, pain at site of injection, platelet dysfunction or thrombocytopenia, and seizures