According to the CDC, West Virginia has one of the highest antibiotic prescription rates in the United States.[1]

Outpatient settings are an important area for antibiotic stewardship

The majority of antibiotic use occurs among outpatients [2]

Approximately 30% of US outpatient antibiotic prescribing is estimated to be unnecessary [2]

BE ANTIBIOTICS AWARE

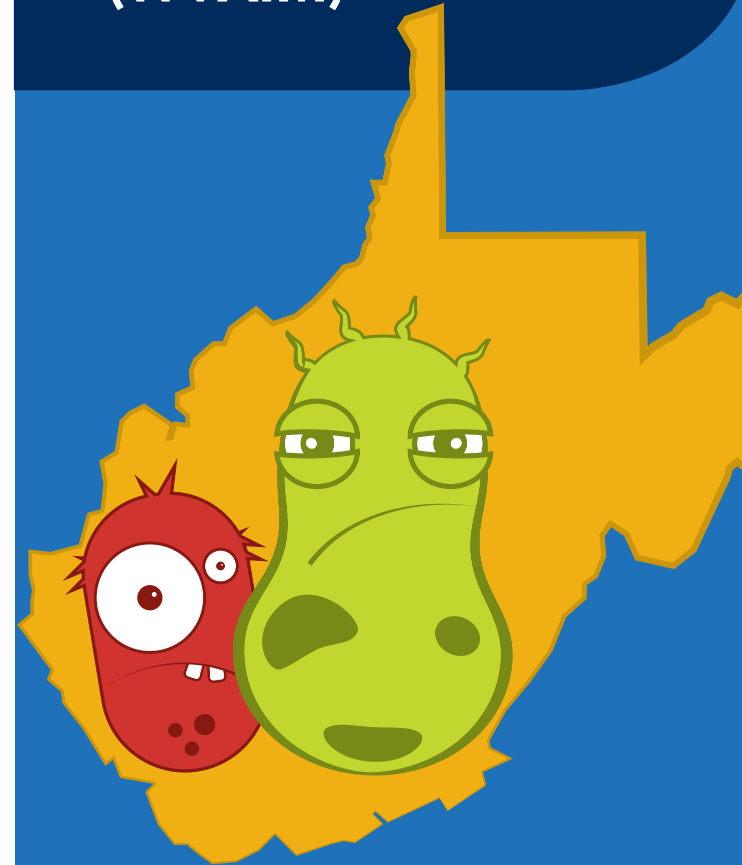
SMART USE, BEST CARE

WVU Medicine Children's

West Virginia University
SCHOOL OF MEDICINE

go.wvu.edu/antibioticawareness

West Virginia Antibiotic Informed Management (WVAIM)



NOT ALL BUGS NEED DRUGS

Keeping our country roads safe

How can you improve antibiotic use?

Commitment

– Identify leadership

– Display Commitment Posters

Education

– Complete the CDC Training on Antibiotic Stewardship: train.org/cdctrain/training_plan/3697

– Provide patient and community education

Action

– Implement at least one antibiotic intervention in your practice

Tracking and Reporting

– Continue to monitor antibiotic prescribing practices

West Virginia Informed Antibiotic Management Resources

– Free Commitment posters

– Continuing education opportunities

– Patient and community education materials:

- ▸ **Pediatric Treatment Recommendations Pocket Card**
- ▸ **Sick Child Handout**

– Continuous involvement through social media and newsletters

– A Field Guide to Antimicrobial Stewardship in the Outpatient Setting (Quality Improvement Organizations (QIO) program)

– MITIGATE Antimicrobial Stewardship Toolkit

Acute Sinusitis

Diagnosis

Halitosis, fatigue, headache, decreased appetite and most physical findings are non-specific and do not differentiate bacterial from viral causes.

Bacterial diagnosis maybe established based on the presence of one of the following:

– Persistent symptoms without improvement: nasal discharge or daytime cough >10 days

– Worsening symptoms: worsening or new onset fever, daytime cough, or nasal discharge after initial improvement of a viral URI

– Severe symptoms: fever ≥ 39°C, purulent nasal discharge for at least 3 consecutive days

Imaging tests are no longer recommended for uncomplicated cases

Management

If bacterial infection is established:

– Watchful waiting for up to 3 days may be offered for children with persistent symptoms. Antibiotics should be prescribed for severe or worsening disease.

– First line: Amoxicillin (90mg/kg/day BID) or amoxicillin/clavulanate (90mg/kg/day of amoxicillin BID)

– Children who cannot tolerate oral; single dose of ceftriaxone can be used then switch to oral if improving

– Further recommendation: AAP or IDSA guidelines

Pediatric Treatment Recommendations Pocket Card

Expanded content and references available at: cdc.gov/antibiotic-use/community/for-hcp/outpatient-hcp/pediatric-treatment-rec.html

Acute Otitis Media (AOM)

Diagnosis

Definitive diagnosis requires either:

– Moderate or severe bulging of the tympanic membrane (TM) or new onset otorrhea not due to otitis externa

– Mild bulging of the TM and recent (<48h) onset of otalgia (holding, tugging, rubbing of the ear) or intense erythema of the TM

AOM should not be diagnosed in children without middle ear effusion (based on pneumatic otoscopy and/or tympanometry)

Management

– Watchful waiting for mild cases with unilateral symptoms in children 6-23 months or unilateral or bilateral symptoms in children >2y

– **First line:** Amoxicillin (80-90 mg/kg/day BID) for children who have not received it within the past 30 days

– Amoxicillin/clavulanate (90 mg/kg/day of amoxicillin BID) if amoxicillin was prescribed within the past 30 days, concurrent purulent conjunctivitis, or history of recurrent AOM unresponsive to amoxicillin

– **For non-type I hypersensitivity to PCN:** Cefdinir (14 mg/kg/day QD/BID), cefuroxime (30 mg/kg/day BID), cefpodoxime (10 mg/kg/day BID), or ceftriaxone (50 mg/kg) IM for 1-3 days)

– **Duration:** Children< 2 yrs and children with severe symptoms, a 10-day course. For children 2 to 5 years of age with mild or moderate AOM 7 d course. For children>6 years with mild to moderate symptoms, a 5- to 7-day course is adequate treatment.

– Prophylactic antibiotics are not recommended to reduce recurrence of AOM

How to care for your sick child | West Virginia Antibiotic Informed Management (WVAIM)

Symptoms of a cold:

– Runny nose

– Sneezing

– Fever

– Not wanting to eat

– Sore throat

– Cough

– Fussiness on-and-off

– Swollen glands

How to treat a cold at home:

– Allow extra sleep

– Drink lots of fluids

– Avoid cigarette smoke

– Warm washcloth over forehead

– Ice chips or throat lozenges for children over 6

– Over the counter medicines – ask your pharmacist for recommendations and how much to give

Most symptoms should go away slowly after 7-10 days

WHEN TO CALL A DOCTOR OR GO TO THE EMERGENCY ROOM:

If your child is younger than 3 months and has a fever over **100.4°F**, always call your doctor right away!

When to take your child to the doctor for mild illnesses:

Sore Throat:

– Lasts more than 1 week

– Difficulty swallowing or breathing

– Pus on the back of the throat

Ear Infection:

– Lasts more than 2-3 days

– Fever **102.2°F** or higher

– Severe pain

– Fluid coming out of the ear

Cold, Cough, Runny Nose:

– Lasts more than 10 days

– Trouble breathing

– Symptoms that are severe or unusual

Watch for emergency warning signs that require medical care:

– Fast breathing or trouble breathing

– Bluish, purplish or gray skin color

– Not drinking enough fluids

– Not urinating, no tears when crying

– Severe or persistent vomiting

– Not waking up or interacting

– Temperature over **104°F**

References:

1. Hicks LA, et al. US Outpatient antibiotic prescribing variation according to geography, patient population, and provider specialty in 2011. Clinical Infectious Diseases 2015; 60(9): 1308-16.

2. Fleming-Dutra KE, et al. Prevalence of inappropriate antibiotic prescriptions among US ambulatory care visits, 2010 - 2011. JAMA 2016; 315:1864-73.

Visit our website for more information and resources: go.wvu.edu/antibioticawareness