

Antibiotics – For Better or For Worse

Resistance isn't the only problem!

Discussing antibiotic resistance with practitioners or families may at times seem intangible or difficult to get the point across. However, the direct, immediate complications (i.e. adverse drug events) associated with antibiotics are often well-understood. Below are facts that both prescribers and patients should consider the next time, and every time, an antibiotic is prescribed to a child.

- Adverse drug events result in a substantial number of health care visits, particularly in outpatient clinics. Greater than an estimated 150,000 children are treated in emergency departments annually for adverse drug reactions, in which antimicrobials are the most commonly implicated drug. (1)
- There is approximately a one in 1000 risk that an individual prescribed an antibiotic will require a visit to the emergency department because of an antibiotic side effect, but only one in 4000 chance that an antibiotic will prevent a serious complication from an upper respiratory infection. (2)
- It can be impossible to differentiate an adverse drug reaction, such as a rash, from a viral exanthem. Therefore, many children who are evaluated for a presumptive antibiotic drug reaction are indefinitely labeled with an antibiotic allergy. This typically remains a permanent label through life resulting in future exposures to broader spectrum antibiotic that may be less efficacious, more costly, and more toxic.

- 1) national surveillance of emergency department visits for outpatient adverse drug events in children and adolescents
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- 2) Centers for Disease Control and Prevention. Website: http://www.cdc.gov/medicationsafety/program_focus_activities.html. last accessed November 1, 2014.