Stewie Shares October 2022

# MEDICATION SAFETY AND ANTIBIOTICS

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Antibiotics are one of the **most prescribed medications** in the US. In 2020, ~<u>202 million antibiotic courses</u> were prescribed. While antibiotics are highly effective, they **can cause harm** as all medications can.





**Adverse events** (AEs) are "unintentional events associated with medication use" which can include side effects with antibiotics (ex. stomach upset, *C. diff* infection, or allergies).

A <u>recent study</u> found that **20% of hospitalized children experience an AE** due to an antibiotic. Each day receiving an antibiotic increased risk by 7%.

Medication errors can occur anytime from prescribing to administration (Ex. ordering the wrong dose or administering the wrong drug). Lack of communication among teams can be the root cause of events related to antibiotics.

## What can A do:

### As a Clinician

- Prescribe antibiotics only when necessary and for the <u>shortest duration</u>
- Discuss indication, dose, duration, <u>administration</u>, and side effects so the team and family **understand treatment**
- Antibiotics are **dosed differently** per indication. Consult pharmacy or ASP when in doubt about dose
- Beware of dosing for combination antibiotics! Ex: sulfamethoxazole/ trimethoprim is dosed on the trimethoprim component only
- Amoxicillin/clavulanate comes in many concentrations specific for different doses/indications. Click <u>here</u> to make sure

## As a Parent/Patient

- Take antibiotics **only when necessary as directed** by a clinician. Most infections are caused by <u>viruses</u> for which antibiotics are not effective
- Properly store and dispose of medications
- Look out for serious side effects (lip swelling, wheezing, trouble breathing, severe diarrhea, etc) and call your clinician if these occur
- Use caution when **administering** antibiotics, especially **liquids**. Confirm instructions with your pharmacist when picking up the prescription
- Click <u>here</u> for more info

#### you pick the correct concentration

# Click here to take a quiz!



Damon Pabst has been a pharmacist at CM for 25 years with most of his time being spent in the Pediatric Intensive Care Unit. He transitioned to the medication safety coordinator position eight years ago. He has completed the Institute for Safe Medication Practices Medication Safety Intensive and medication safety certification from the Association of Health Systems Pharmacy.

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