

Louisiana Pharmacists Association Educates Patients About Key Counseling Points on Common Antibiotics

Most people have probably picked up an antibiotic for themselves or a loved one at some point in their life. There seems to be so many different requirements for all the numerous antibiotics available that it can be hard to keep straight which ones need to be refrigerated, which ones can be taken with food, or what the potential side effects are. As Louisiana pharmacists dispense antibiotic medications at an approximately one prescription to one patient ratio per year, it is important that everyone is counseled on rules/misconceptions for common antibiotics.¹

Proper education on antibiotics will better ensure that they are used as intended. Improper use of antibiotics can lead to a phenomenon called antibiotic resistance, where bacteria become resistant to the drugs we use to fight infections. If enough bacteria become resistant to a particular drug, we can no longer use that drug and treating infections becomes harder for everyone. In the paragraphs to follow, common counseling points for some of the more frequently dispensed antibiotics per the Center for Disease Control and Prevention (CDC) will be discussed.

Azithromycin, more commonly known as the Z-PAK, is a frequently dispensed antibiotic with a unique regimen. Azithromycin is what's known as a macrolide antibiotic, and this antibiotic can be used to treat conditions such as sinus infection, tonsillitis, ear infections, and pneumonia, amongst other conditions.² This antibiotic is commonly administered as a five day regimen where the first day has a “double dose” meaning the patient should take 2 tablets on the day of initiation followed by a single dose on the remaining days. Z-Paks can be taken with food, but antacids that contain aluminum or magnesium such as Mylanta or Rolaids should not be given with this antibiotic as they could decrease its effectiveness.² Lastly, even in liquid formulation this antibiotic is safe to be stored at room temperature or refrigerated for up to 10 days. However, it is worth noting that extended release formulations such as Zmax should not be refrigerated.

Azithromycin

- ❖ Can be taken with food
- ❖ Does not need to be refrigerated
- ❖ Mild stomach upset can be experienced

Amoxicillin is a commonly used Penicillin that is covered under the umbrella term beta-lactam antibiotics. These antibiotics are used to treat common bacterial infections including infections of the ear, nose, and throat, urinary tract infections (UTI), Lower respiratory tract infections including pneumonia, and some infections of the skin. Liquid forms of amoxicillin are typically recommended to be refrigerated but are still safe to use at room temperature. This antibiotic can (and should be!) taken with food in the event of stomach upset or gastrointestinal issues.

Although uncommon, rashes are reported by greater than 1% of the individuals that take penicillins.

Amoxicillin

- ❖ Can be taken with food
- ❖ Refrigerated or not refrigerated
- ❖ Mild Stomach upset and slight incidence of rash

Cephalosporins are a group of antibiotics commonly used in the treatment of respiratory tract infections, ear infections, skin infections, bone infections and UTIs. These antibiotics can often be identified by their name, as most of them start with “Ceph” as in cephalexin (Keflex), or “Cef” as in ceftriaxone (Rocephin). These antibiotics work much in the same way as penicillins do. Liquid preparations of cephalosporins should often be refrigerated, as leaving them out on the counter can reduce their effectiveness in fighting infections. Most cephalosporins should be taken on an empty stomach 1 hour before or 2 hours after meals, but may be taken with food to reduce stomach upset. Side effects are rare, but gastrointestinal upset such as diarrhea, or thrush (a fungal infection of the mouth or vagina) may be experienced.

Cephalosporins

- ❖ Refrigeration requirement varies- consult your pharmacist
- ❖ Taken without food, unless you are experiencing stomach discomfort
- ❖ Probiotics may help alleviate gastrointestinal (GI) side effects
- ❖ GI side effects are the most common, and fungal infections are not unheard of
- ❖ Possible allergic cross sensitivity between penicillins and cephalosporins

It is worth noting that the information listed above can always be attained by asking your pharmacist to counsel you on the antibiotics you are receiving. Always feel comfortable in asking the pharmacist if you have questions about your antibiotic or any other medications you are taking! It is important to your health and the health of those around you to understand the nuances of antibiotic regimens.

Finally, regardless of the type or brand of antibiotic you are taking, it is always important to complete the entire regimen prescribed to you by your healthcare provider (even if you start to feel better sooner!). It is also important to remember that not every illness needs antibiotic treatment, as unnecessary usage of antibiotics contributes to the growing problem of resistance. This ensures that you will have the best chance of getting and staying healthy, and ensures that our antibiotics will stay effective in treating infections for years to come!

References

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