

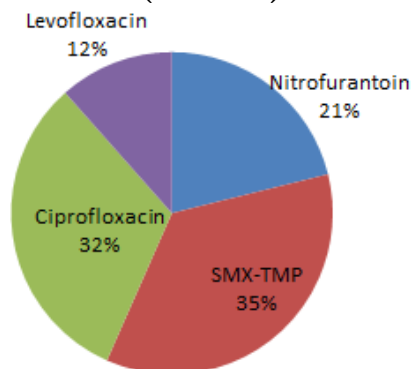
- The review strengthens existing warnings: Fluoroquinolones are associated with side effects including a rare, disabling, and potentially permanent syndrome involving multiple organ systems.
- This syndrome can last a month or longer.
- Most patients (97%) complain of musculoskeletal symptoms involving muscles, joints, or tendons.
- Other affected systems include neuropsychiatric (68%), peripheral nervous system (63%), and vision or hearing (32%).
- Less common side effects—skin (15%) or cardiovascular (12%).
- Fluoroquinolones should be used only when no alternative antibiotic exists such as serious bacterial infections (anthrax, plague, bacterial pneumonia, etc.) or for those with acute bacterial sinusitis, acute exacerbation of chronic bronchitis and uncomplicated urinary tract infections, who have no alternative treatment options.

- ✓ The use of fluoroquinolones should be avoided in the following diagnoses because the risk of serious side effects outweighs the benefits:
 - Bacterial sinusitis
 - Acute exacerbation of chronic bronchitis
 - The above are often viral and don't require antibiotic therapy
 - Uncomplicated urinary tract infection
 - The above can be treated with other antibiotics.
- ✓ An FDA safety review suggests that updates be made to the Warnings and Precautions Section for the antibiotic class of Fluoroquinolones.
- ✓ These side effects can occur hours to weeks after exposure to fluoroquinolones and may potentially be permanent.
- ✓ The review also found that these serious side effects can occur simultaneously.

Alternatives for Uncomplicated UTI

- ✓ Trimethoprim/sulfamethoxazole (TMP/SMX) for 3 days
- ✓ Nitrofurantoin for 5 days (short-term use is okay if CrCl is over 30 mL/min. even in elderly women.)
- ✓ Cephalosporins (cephalexin, etc) or amoxicillin/clavulanate for 7 days (these may not work as well as TMP/SMX or nitrofurantoin).

Select Antibiotic Utilization in the Previous 6 months (% of total)



FDA Approved Fluoroquinolones:

Ciprofloxacin* (Cipro)
Levofloxacin* (Levaquin)

*Formulary for Neighborhood members

Moxifloxacin (Avelox)
Ofloxacin (Floxin)
Gemfloxacin (Factive)