

## Bugs and Drugs Guide to Antimicrobial Therapy: Order now

**Y**ou can place your order for the 2012 *Bugs and Drugs* guide now at [www.fluidsurveys.com/s/BugsandDrugs](http://www.fluidsurveys.com/s/BugsandDrugs). The guide is provided through the *BC Do Bugs Need Drugs?* program, operated by the BCCDC with support from the Ministry of Health. This year, in response to popular interest, you have a choice of ordering the guide as a hardcopy book or as an iPhone app. One copy will be available free of charge for each physician, nurse practitioner, and medical, pharmacy, and dental student in BC, as well as for all hospital pharmacists and each community pharmacy.

While there are several other sources of information on antibiotic prescribing, we encourage the use of *Bugs and Drugs* in British Columbia for the following reasons:

- It is a single source of guidance on the management of all common infections.
- It cites national and international guidelines and is further informed by a thorough review of the literature.
- *Bugs and Drugs* is uniquely attuned to current antibiotic susceptibility patterns for Western Canada.
- For infections where antibiotics are not of proven value, the guidelines provide advice on symptomatic treatment backed by the best available evidence.
- *Bugs and Drugs* emphasizes appropriate, evidence-based, first-line therapy. This preserves newer and broader spectrum agents for conditions where they make a therapeutic difference.
- The guide has been produced without industry sponsorship or influence.

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*This article is the opinion of the BC Centre for Disease Control and has not been peer reviewed by the BCMJ Editorial Board.*

Antibiotic-resistance represents a clear and present danger to health in this province. In recent years, a number of trends in resistance have directly reduced the effectiveness of treatment and contributed to morbidity. Among gram-negative pathogens, especially those causing urinary tract infections (UTI), the problem ranges from simple resistance to fluoroquinolones or cotrimoxazole through to high-level resistance to most available antibiotics mediated by extended spectrum beta-lactamases that are often genetically linked to other broad resistance determinants. While the upward trend has leveled off, community-associated MRSA still accounts for about one-quarter of staphylococcal infections and adds complexity to treatment. Mortality from *Clostridium difficile* disease (sometimes a consequence of using unnecessarily broad-spectrum agents) is a large problem and facility outbreaks are observed from time to time in BC.

These developments are of concern, but there is progress being made due to our collective efforts in BC. Macrolide and penicillin resistance among gram-positive pathogens has leveled off, but should still be monitored. BC physicians use fewer antibiotics per patient than they did in 2005, especially for children. BC physicians have adapted their prescribing for UTI and are now using proportionately more nitrofurantoin for uncomplicated cystitis. This spares the use of fluoroquinolones. We are using more cotrimoxazole and doxycycline for skin and soft tissue infections. This is appropriate where antibiotics are needed for complicated CA-MRSA infection. However, the majority of abscesses can be managed with local treatment and incision and drainage alone.

In this year's edition of *Bugs and Drugs*, authors Blondel-Hill and Fryters update the therapeutic approach in a number of critical ways. They include a comprehensive approach to assessment and treatment for MRSA and a re-examination of current use of fluoroquinolones and macrolides for respiratory infections in light of changing patterns of resistance. The authors now provide a great deal of guidance on differential diagnosis of various syndromes and comparative risk and benefit of using various antibiotics with respect to such outcomes as *C. difficile* infection. They have carefully reviewed new data on optimal duration of therapy to assure that recommended treatment does the job but does not provide excess exposure to antibiotics. For complicated infections, such as pneumonia, meningitis, endocarditis, and continuous ambulatory peritoneal dialysis peritonitis, the guide continues to provide excellent advice on empirical therapy, but also adds a section with clear direction for definitive therapy in the event of identification of a causal pathogen.

Antibiotic stewardship means far more than simply reducing use of antibiotics in order to avoid selection of resistant organisms, though reduction in use is critical. It also means that we need to select the appropriate antibiotics when we do need to treat and that we apply an optimal dose, route, and duration of therapy.

*Bugs and Drugs* should help your prescribing in all of those directions. You can order your copy at [www.fluidsurveys.com/s/BugsandDrugs](http://www.fluidsurveys.com/s/BugsandDrugs).

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