

period of high infectiousness that lasts for 4 to 6 weeks after infection). Testing earlier may diagnose acute HIV infection, and if diagnosis leads to behavior change, new HIV infections may be prevented during this period of increased transmission risk.²

Earlier testing can help if patients are anxious about their HIV status following a potential exposure to HIV. An early negative result at 6 weeks, which is likely to remain HIV negative at 3 months, may help to reduce anxiety.

Staying informed

As HIV tests continue to improve, these recommendations may change. Up-to-date resources for providers on HIV tests in use in BC and their characteristics can be found at www.bccdc.ca.

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Antibiotic use in our livestock

Should doctors be concerned about antimicrobial resistance in animals, particularly food animals? The Environmental Health Committee thinks so. Doctors are increasingly aware that viral infections in our patients are unphased by the prescription of antibiotics. We are made more aware by campaigns such as *Do Bugs Need Drugs?* that educate the public and hopefully help doctors limit antibiotic prescriptions if there is little objective evidence that they will be curative.

In our offices we see resistance to antibiotics that in the recent past were effective at killing disease-causing organisms. Farmers and veterinarians have watched as antibiotics have become much less effective at treating diseases in their cattle, sheep, pigs, and chickens. Physicians, veterinarians, farmers, and patients all share the threat of increasing bacterial resistance in the community and hospitals because of antibiotic overuse. Few replacement drugs are being developed.

Low levels of antibiotics and antibiotic resistant organisms are being found in diverse sampling sites around North America. Antibiotic resistant organisms can be spread to the environment through human and animal waste streams and manure ponds. This deserves more investigation! Transfer of resistance between bacteria through “resistance genes” can occur even though the bacteria are not directly exposed to the antibiotic.

Antibiotics are sold as “growth promoters” to the livestock industry. There is limited regulation of what can be imported and used in livestock, and where there is needed regulation, enforcement isn’t effective. Federal and provincial efforts to control this may work at cross purposes. A provision called “own use” enables certain ex-

emptions and provides a loophole for those importing any amount of antibiotic. This makes accurate research into outcomes invalid.

A decade ago the Advisory Committee on Animal Uses of Antimicrobials and Impact on Resistance and Human Health made 38 recommendations to the Canadian government in an effort to change the ways that antimicrobials are regulated, distributed, and used in animals. Few of these have been adopted. They should be re-examined in light of the fact that costs of treating human infections increases as more resistance develops. Further, investment in systematic monitoring and appropriate action is critical to ensure we are using our antibiotics in the most responsible way.

Doctors should indeed be concerned about antibiotic use throughout our shared environment. The Environmental Health Committee will be bringing a resolution to the Canadian Medical Association’s general council meeting in August. It recommends the CMA call upon the federal and provincial agricultural and environmental ministries to investigate the release of antibiotic resistant organisms and residual antibiotics from agricultural operations into the earth and water ecosystems and the role they play in the emergence of antibiotic resistant organisms in humans. A second resolution recommends the CMA call upon the Ministry of Agriculture to investigate animal husbandry techniques that decrease the need for antibiotics in animals and support those techniques proven to be effective.

Modern medicine needs effective antibiotics. We hope the doctors of Canada will support these important resolutions.

—Bill Mackie, MD, Chair,
Environmental Health Committee