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Current approaches to infectious diseases, Part 2

“Quality means doing it right when no one is looking! As we express our gratitude, we must never forget that the highest appreciation is not to utter words, but to live by them.”
—John F. Kennedy



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This editorial has been peer reviewed.

Welcome to the second of a two-part series on infectious diseases in British Columbia (part 1 appeared in the May 2022 issue of the *BCMJ*). The first article in part 2 focuses on antimicrobial stewardship (Wong and colleagues). Antibiotics prevent millions of deaths each year and remain the primary treatment for potentially fatal bacterial infections. Yet, inappropriate prescription rates and overuse of antibiotics have led to antibiotic resistance, which has created a global health emergency that kills at least 700 000 people per year. If no action is taken, this rate is predicted to increase to 10 million deaths per year by 2050. This article provides a comprehensive review of common infectious syndromes and the most up-to-date recommendations on duration of antibiotic therapy.¹⁻⁴

The second article provides a comprehensive review of hepatitis B epidemiology and treatment of different stages of this hard-to-kill infection (Wong). In 2017, 4905 cases of hepatitis B virus infections were reported in Canada: 192 cases of acute infection (corresponding to a rate of 0.5 per 100 000 population), 4086 cases of chronic infection (11.4 per 100 000), and 627 cases of unspecified status. In 2017, acute hepatitis B rates were highest in males aged 30 to 39 years (1.19 per 100 000) and in females aged 25 to 29 (0.67 per 100 000). Rates of chronic hepatitis B in British Columbia (21.7 per 100 000 population) were above the national

average (11.4 per 100 000) and the average for Alberta (12.6 per 100 000), Yukon (12.6 per 100 000), and Ontario (12.5 per 100 000).⁵⁻⁹

The third article focuses on Lyme disease, particularly in BC (Morshed and Bowie). Lyme disease is considered the most common tick-borne disease in BC and North America. Unlike in eastern Canada, the rate of Lyme disease has remained low in BC. The infection is preventable by avoiding tick bites and removing attached ticks early. Early diagnosis and antibiotic treatment are important because Lyme disease can lead to serious complications if left untreated.

However, extreme caution needs to be applied in order to avoid overdiagnosing Lyme disease, and experts should be consulted when there is discordance between clinical and test results.¹⁰⁻¹⁴

The final article presents an analysis of travel-acquired infections and illnesses in British Columbians based on data from the GeoSentinel global surveillance network (Zapata-Dixon and colleagues). These data are used to alert public health and other relevant authorities during early signs of emerging infectious diseases in our province and country and in any other part of the world.¹⁵⁻¹⁸ ■

Welcome to the second of a two-part series on infectious diseases in British Columbia.

References

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Inappropriate prescription rates and overuse of antibiotics have led to antibiotic resistance, which has created a global health emergency that kills at least 700 000 people per year.



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