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Appendix C: Epidemiology of HFE hemochromatosis

HFE-HH is the most common genetic disorder in the western world. Approximately 1 in 300 individuals of European ancestry are homozygous for the C282Y HFE gene variant¹¹ (i.e., both copies of the HFE gene carry this genetic change) and 1 in 9 such individuals are carriers (see Table 2). HFE-HH is rare in individuals of other ancestries, including individuals of East Asian or South Asian descent, largely due to the rarity of the C282Y variant in these non-European populations.¹²

Table 1. Estimated number of people with HFE C282Y in the BC population based on the Canadian 2016 Census¹³

Genotype	Estimated # individuals in BC
Homozygote (C282Y;C282Y)	7846
Heterozygote	362,622

Table 2. HFE-HH-C282Y in different populations¹¹

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Population	Homozygote frequency (%)	Carrier frequency (%)
European	0.33	11.0
Latino	0.02	2.7
African	0.01	2.1
South Asian	~0	0.4
East Asian	~0	0.03