

Part

1

Overview

Tobacco use is the world's leading cause of preventable death. This major public health threat exists within the context of a complex interplay between genetic and environmental causes of nicotine dependence, and understanding this balance may hold the key to further reductions in the disease burden and mortality due to chronic tobacco use. This monograph explores the role of genetics in the etiology of nicotine dependence. It provides a conceptual framework for understanding nicotine dependence and for examining the usefulness of a range of potential phenotypes and endophenotypes for linking genes to behavior.

This introductory part starts by summarizing the epidemiology of tobacco use, the history of genetic studies in tobacco, and the measurement of nicotine dependence. It then provides a literature review of selected biometric and genetic studies of nicotine dependence and ends with a discussion of some of the most important issues in the communication of genetic findings.

