

ESSENTIALS OF MEDICAL VIROLOGY

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Essentials of
Medical Virology

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PREFACE

We live in an era when most of mankind's prominent diseases caused by bacteria have been dramatically reduced, and in certain cases eradicated, by vaccination, chemotherapy and sanitation. Laboratory techniques have become standardized for nearly all bacterial diseases and are performed at reasonable cost and with reasonable speed at most hospitals. Despite these facts, bacteria are still the major cause of death from infectious disease in the United States.

Viral diseases, on the other hand, have been prevented and controlled primarily by vaccination. Chemotherapy for viruses is in its infancy, and its efficacy is still questionable. Virus isolation techniques are at present complex, costly, time consuming and not yet even available at most hospitals. In clinical practice it is the physician alone who must often make the decision, on the basis of physical signs and symptoms, as to the possible presence of a viral disease. This decision may or may not be later corroborated by laboratory data. It is therefore essential that medical practitioners and health scientists be aware of the clinical features, epidemiology, risk, sequelae and control of all prominent viral diseases, as well as laboratory tests that are available for confirmation of specific viral involvement.

This book is a compilation of material presented in the virology portion of a didactic course in medical microbiology to freshmen and sophomore medical students. It is designed to provide a quick reference to information on basic and clinical aspects of human viral disease for student and graduate health professionals.

Robert W. Pumper

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Part One

**GENERAL
CONCEPTS
OF VIROLOGY**

