

Cambridge University Press & Assessment
978-1-009-33441-9 — Clinical and Diagnostic Virology
2nd Edition
Tim Wreghitt , Goura Kudesia
Frontmatter
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‘This comprehensive text will provide an excellent guide to all the many healthcare professionals, including those in training, who deal with patients who have, or may have, a virus infection. The rigorous structure to each chapter, with clear tables and concise factual exposition makes it easy to look up specific queries, or to learn about a specific infection in depth. This is a timely and very welcome addition to the canon of medical textbooks, given the increasing importance and relevance of clinical virology to general medicine.’

Will Irving, Professor and Honorary Consultant in Virology, University
of Nottingham and Nottingham University Hospitals NHS Trust

‘This concise guide proves invaluable for those working within clinical virology and studying for CICE/FRCPath Part 1. As it is organised by individual viruses and clinical syndromes, it serves as both a quick reference guide and an effective teaching tool. Personally, I have found the first edition of this book to be very useful throughout my career so far, so an updated second edition is most welcome!’

Dr Hayley Colton, Specialty Registrar in Medical Virology/Infectious
Diseases, Sheffield Teaching Hospitals NHS Foundation Trust

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Second Edition

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Sheffield Teaching Hospitals



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Preface

This book is a comprehensive overview of clinical and diagnostic virology for those healthcare professionals who are caring for people who have or may have viral infections. There are embedded links to relevant websites, where detailed, up-to-date advice on clinical management can be found.

The book is intended for use by infection speciality trainees as well as primary care practitioners, trainee doctors, healthcare scientists, infection control nurses and other healthcare professionals (doctors, nurses and healthcare staff) working in non-infection specialities who deal with patients with suspected virus infections.

The aim of the book is for it to be a quick reference guide to differential diagnosis, giving information on which specimens and tests are best for laboratory diagnosis and how to interpret results, which treatments to use and what the implications are for control of infection.

The book has easily accessible information, with tables, figures and algorithms to aid easy reference for the busy clinician. After a chapter on basic virology, the book is divided into four main sections:

- An alphabetically arranged series of chapters on individual viruses. We have used a standard chapter format throughout, to enable the reader to access important information (e.g. epidemiology, route of spread, prevalence, clinical presentation, laboratory diagnosis and interpretation of results and treatment) quickly and easily.
- A set of clinical syndromes (e.g. hepatitis and skin rashes) where different viruses and their clinical syndromes are presented.
- A laboratory diagnosis section.
- A patient management section, giving information on the use of antiviral drugs, viral vaccines, occupational health, and public health and pandemic preparedness.

We are aware that most virologists in the UK deal with some non-viral pathogens (e.g. chlamydia, toxoplasma, atypical pneumonia organisms), so chapters on these pathogens are also included.

In revising this book for the second edition, we have updated all the chapters in the previous edition and added chapters on SARS-CoV-2, viral zoonotic infections, quality control and laboratory accreditation, and public health and pandemic preparedness.

We hope you enjoy reading this book and find it a useful source of information. We hope it will help you manage patients and resources better or learn more about viruses and their impact on human health.

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Abbreviations

AIDS	acquired immunodeficiency syndrome
ALT	alanine transaminase
ART	antiretroviral therapy
ATL	adult T-cell leukaemia/lymphoma
BAL	bronchoalveolar lavage
BASL	British Association for Study of Liver Disease
BBV	blood-borne virus
BHIVA	British HIV Association
BMT	bone marrow transplant
CDC	Centers for Disease Control and Prevention
CJD	Creutzfeldt-Jakob disease
CMV	cytomegalovirus
CNS	central nervous system
CSF	cerebrospinal fluid
DAA	direct-acting antiviral
DNA	deoxyribonucleic acid
DS	double stranded
EASL	European Association for Study of Liver Disease
EBV	Epstein–Barr virus
EDTA	ethylenediaminetetraacetic acid
EI	erythema infectiosum
EIA	enzyme immunoassay
ELISA	enzyme-linked immunosorbent assay
EM	electron microscopy
FVU	first-void urine
HIV	human immunodeficiency virus
HAV	hepatitis A virus
HBV	hepatitis B virus
HCV	hepatitis C virus
HCW	healthcare worker
HDV	hepatitis D virus
HEV	hepatitis E virus
HHV	human herpes virus
hMPV	human metapneumovirus
HNIG	human immunoglobulin
HPV	human papillomavirus
HSV	herpes simplex virus
HTLV	human T-cell lymphotropic virus
ICU	intensive care unit
IF or IFT	immunofluorescence test
I/V	intravenous
LRTI	lower respiratory tract infection
MERS	Middle East respiratory syndrome
MMR	measles, mumps and rubella
mRNA	messenger RNA
MSM	men who have sex with men
NAAT	nucleic acid amplification techniques/test
NHS	National Health Service
NK	natural killer
PCR	polymerase chain reaction
PEP	post-exposure prophylaxis

x	List of Abbreviations
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PIV	parainfluenza virus
POC	point of care
POCT	point of care testing
PrEP	pre-exposure prophylaxis
PTLD	post-transplant lymphoproliferative disease
PWIDs	persons who inject drugs
RNA	ribonucleic acid
RSV	respiratory syncytial virus
RT-PCR	reverse transcription polymerase chain reaction
SARS	severe acute respiratory syndrome
SARS-CoV-2	SARS coronavirus 2
SIV	simian immunodeficiency virus
SS	single stranded
STI	sexually transmitted infection
STLV	simian T-lymphotropic virus
TBE	tick-borne encephalitis
TCR	T-cell receptor
TSE	transmissible spongiform encephalopathy
UKHSA	UK Health Security Agency
VCA	viral capsid antigen
vCJD	variant Creutzfeldt-Jakob disease
VLP	virus-like particle
VZIG	varicella-zoster immune globulin
VZV	varicella-zoster virus
WHO	World Health Organization
YFV	yellow fever virus
ZV	Zika virus