

THIRD EDITION

# Infectious diseases of children

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*With 66 figures and 8 plates in full color,  
including a gatefold insert*

The C. V. Mosby Company  
Saint Louis 1964

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- 1** Chickenpox (varicella), 17
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## Preface to third edition

**D**ramatic changes in infectious diseases have occurred since 1960 when the second edition of *Infectious Diseases of Children* appeared. Hundreds of millions of doses of live attenuated poliovirus vaccines have been given to people the world over. Americans received over two hundred million doses of oral polio-vaccine which, in conjunction with inactivated vaccine, has reduced the number of cases of paralytic poliomyelitis to fewer than 400 during 1963, the lowest annual incidence recorded in the United States since reporting was initiated in 1912. Live attenuated measles vaccine has been widely distributed to American children. These two live immunizing agents are capable of wiping poliomyelitis and measles from the face of the earth. The remaining task is that of getting the vaccines to susceptible persons. Recommendations for the use of these vaccines have been included in the chapters describing these diseases.

At long last, rubella virus has been propagated in tissue cultures. This achievement has led to new knowledge about the natural history of rubella, and it gives promise of a vaccine in the course of time. The new developments are discussed in detail in the chapter on rubella.

A newly characterized group of viruses, the rhinoviruses, have been established as causative agents of the common cold. The Eaton agent of primary atypical pneumonia, considered by some to be a virus for twenty years, has been recently identified as a pleuropneumonia-like organism (PPLO), genus *Mycoplasma pneumoniae*. These agents, together with the myxoviruses, the adenoviruses, the picornaviruses, and others, are discussed together in two new chapters describing acute respiratory disease, one dealing with etiology and the other with clinical manifestations and treatment.

The growing importance of cytomegalovirus infections (cytomegalic inclusion disease) is recognized in a new chapter. The clinical manifestations of cytomegalovirus infection and the similarities between its causative agent and the herpesviruses are described.

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A new chemical compound, methisazone (n-methylisatin- $\beta$ -thiosemicarbazone), is apparently capable of preventing smallpox. Also, a chemotherapeutic approach to the treatment of herpes simplex infections of the eye by means of 5-iodo-2'deoxyuridine (IDU) has been reported. These signal achievements in the treatment and prevention of two viral infections spur the imagination and give hope to the clinician who has been frustrated by the lack of specific therapeutic agents against most viral diseases.

The treatment of acute bacterial meningitis and of staphylococcal infections, both difficult problems, has been revised to conform with recent experience. Evidence concerning the effectiveness of the new penicillins (methicillin, oxacillin, and ampicillin) are presented. The phenomenon of emergence of sulfonamide-resistant strains of meningococci and how to deal with it is described.

This text does not include chapters on tuberculosis, syphilis, the leptospiroses, yellow fever, malaria, and various mycotic infections. From its inception, this book was not designed to be an all-inclusive text on infectious diseases. Consequently, we feel justified in omitting those diseases with which we have had limited personal experience.

*Saul Krugman  
Robert Ward*

## Preface to first edition

**T**he purpose of this book is to provide a concise and handy description of certain common infectious diseases of children. It is written primarily for pediatricians, general practitioners, and medical students who deal with children. It is well known that the majority of infectious diseases occur in childhood. However, the authors are aware of at least some effects of age on the clinical manifestations and severity of most of the diseases described herein. In general, virus infections such as measles, chickenpox, poliomyelitis, and hepatitis are more severe, more debilitating, and more unpleasant for adults than for children. Accordingly, pertinent differences related to age are discussed in the appropriate sections.

Striking changes have occurred in the picture of infectious diseases during the past two decades. The mortality of bacterial pneumonias and bacterial meningitis has been reduced dramatically. Streptococcal infections are no longer a menace. Scarlet fever is milder, mastoiditis is rare, and erysipelas has virtually disappeared. Diphtheria can be controlled by adequate prophylactic immunization. During the past two years the incidence of poliomyelitis in the United States has fallen off in a manner which suggests that the Salk vaccine was at least partly responsible.

On the other hand, no change has taken place in the incidence of common viral infections such as measles, rubella, chickenpox, and mumps. The common cold is still with us. The newly recognized adenoviruses, myxoviruses, ECHO viruses, and others as yet undiscovered are probably responsible for various acute respiratory infections, including febrile pharyngitis, atypical pneumonia, bronchiolitis, and laryngotracheobronchitis. Many of these infections present serious problems to the physician.

It is exciting to be living in what has been called the Golden Age of viruses. Enteroviruses of the ECHO and Coxsackie groups are known to be responsible for cases of aseptic meningitis with or without rash and summer diarrhea. Coxsackie viruses are known to cause aseptic meningitis, herpangina, epidemic

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pleurodynia, and myocarditis of infants. It is not unreasonable to predict that in the decade to follow we will see changes in virus diseases as dramatic as those which have occurred in bacterial infections since 1937.

The significant advances in the control and treatment of bacterial infections have conferred on the physician a greater responsibility to make an early accurate diagnosis followed by appropriate antimicrobial therapy. Misdiagnosed and maltreated bacterial meningitis has the same ominous outlook today as it had two decades ago. Consequently, the emphasis is on the practical clinical aspects of infectious disease—symptoms and signs, recognition, and management.

The problem of staphylococcal infections, particularly in hospitals, has become increasingly serious during the last decade. A chapter dealing with this important subject has been included.

The value of the book has been enhanced by the chapter on Control of Communicable Diseases by Dr. Morris Greenberg, Director, Bureau of Preventable Diseases, New York City Department of Health. In this chapter Dr. Greenberg presents a guide for the management of patients with communicable diseases in general hospitals. The procedures recommended by Dr. Greenberg have been carried out with success in the Communicable Disease Unit of Bellevue Hospital since 1955.

We are grateful to Dr. Heinz Eichenwald for allowing us to use recent unpublished observations which made an important contribution to the chapter on Toxoplasmosis. We wish to thank Dr. Albert B. Sabin for providing us with unpublished material on the role of ECHO viruses in human disease.

Thanks are due to Dr. S. Fradin for the schematic illustrations of various exanthematous diseases.

Finally, we wish to thank Anne Berger for typing and retyping the manuscript with patience and good humor.

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