of the epiglottis and larynx are categorized as croup syndromes. However, respiratory infections seldom fall into discrete anatomic areas. Infections often spread from one structure to another because of the contiguous nature of the mucous membrane lining the entire tract. Consequently, respiratory tract infections involve several areas rather than a single structure, although the effect on one area may predominate in any given illness.

Etiology and Characteristics

Respiratory tract infections account for the majority of acute illnesses in children. The etiology and course of these infections are influenced by the age of the child, season, living conditions, and preexisting medical problems.

Infectious Agents

The respiratory tract is subject to a wide variety of infective organisms. Most infections are caused by viruses, particularly respiratory syncytial virus (RSV), rhinovirus, nonpolio enterovirus (coxsackievirus A and B), adenovirus, parainfluenza virus, influenza virus, and human metapneumovirus. Other agents involved in primary or secondary invasion include group A beta-hemolytic streptococci (GABHS), staphylococci, *Haemophilus influenzae, Bordetella pertussis, Chlamydia trachomatis, Mycoplasma* organisms, and pneumococci.

Age

Healthy full-term infants younger than 3 months old are presumed to have a lower infection rate because of the protective function of maternal antibodies; however, infants may be susceptible to specific respiratory tract infections, namely pertussis, during this period. The infection rate increases from 3 to 6 months old, which is the period between the disappearance of maternal antibodies and the infant's own antibody production. The viral infection rate remains high during the toddler and preschool years. By 5 years old, viral respiratory tract infections are less frequent, but the incidence of *Mycoplasma pneumoniae* and GABHS infections increases. The amount of lymphoid tissue increases throughout middle childhood, and repeated exposure to organisms confers increasing immunity