Foreword

Pediatric Pulmonary Disorders: A Combination of Breakthroughs and New Disorders

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This issue of Pediatric Clinics of North America updates and summarizes our current understanding of the vast array of conditions leading to difficulties with the pulmonary system in children. The wide range of disorders that are not pulmonary in origin but are, or can be, associated with pulmonary manifestations is substantial and appears to be growing. The authors describe many common disorders associated with pulmonary compromise, including genetic, cardiac, gastrointestinal, rheumatologic, pancreatic, hepatic, endocrinologic, renal, dermatologic, and neuromuscular disorders. New information regarding the pulmonary manifestations of these disorders reflects advances in diagnosis and treatment as well as the emergence of some new disease entities, symptoms, and manifestations. Encouragingly, some of the newly identified pulmonary manifestations, such as some of the pulmonary complications of the human immunodeficiency disorders, reflects greater overall longevity of persons infected with the disease.

 Appropriately, this issue also addresses emerging pulmonary issues resulting from global warming and its associated environmental challenges: increased air pollution and water pollution. Predicted in 1979, global warming is now well described in the literature and well recognized as an international crisis. “Climate change” includes global warming and associated conditions of increasing air pollution, water pollution, and ground-level ozone. Although few of the myriad pulmonary disorders recognized are directly “caused” by global warming/climate change, the increases in global temperature and in the incidence and severity of wildfires appear to be contributing to the severity and incidence of pediatric pulmonary disease. Global warming directly triggers or aggravates preexisting respiratory diseases and increases exposure to risk factors (such as the increasing levels of ground-level ozone) for respiratory...
disorders. Ground-level ozone, a major component of “urban smog,” results from a
sun-induced chemical reaction between nitrogen oxide and organic compounds con-
tained in emissions. It appears to be particularly harmful to children with asthma,
causing airway inflammation and lung tissue damage.4

This update on pediatric pulmonary disorders is especially important, as it repre-
sents a broad look at the advances in the field combating known disorders and also
alerts pediatricians and other child health providers to the growing reality of pulmonary
health consequences for children resulting from the accelerated global warming.

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