Insects and Public Health

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he impact on human development from insects and the insect-borne diseases they transmit has been significant since ancient times. Flies were one of the plagues brought down on the Egyptians at the request of Moses. Flea-borne bubonic plague ravaged Europe after its introduction from Asia in the 14th century and is estimated to have killed one-third of the population of Western Europe between 1348 and 1350. Louse-borne typhus and its habit of following war and social upheaval had more to do with the defeat of Napoleon's armies at the gates of Moscow than did Russian arms. We are familiar with the stories of yellow fever in Cuba and later in Panama during the building of the canal. But above all these, no disease has had a greater impact on human history than malaria. It has been estimated that one-half of all human deaths since the dawn of time have been caused by malaria.

In many ways, the situation with insect- or arthropod-borne disease can be considered worse today than during any time in the past. The rapid growth of human populations, particularly in areas where these disease are endemic, has put more people at risk and has facilitated more infections than ever before. Malaria remains the most serious infectious disease throughout the developing world. The figure of 200–400 million cases of malaria each year may be an underestimate. It is suggested that in Africa alone, more than one million children under the age of five die each year from malaria. Whatever the precise figures, it is clear that malaria morbidity and mortality