Scientific knowledge—supported by the growing awareness of communities—has contributed in recent years to an emphasis on the role of the environment as one of the major elements of the health standard of populations. The view of environment only as the external milieu or scenario where morbidity processes occur has become a new perspective favoring the notion of an ecosystem in which occur interactions between facts of biological, physical, chemical, economic, political and social origins, among others, and of various levels of complexity.

Universities and research institutions are beginning to prepare new theories of and approaches to the relationship between the environment and health, and to prove the association between environmental risk situations and acute events and chronic-degenerative diseases such as, oncologic, respiratory, neurological, immunologic, teratogenic and endocrinologic conditions, among others. Ecological movements, organized throughout the world by various kinds of civil institutions have stimulated discussions on socio-political actions that can deal with the adverse effects on the environment and on health caused by climate changes, ecological changes by development projects, loss of the ozone layer, the quality of water, unsatisfactory sanitation conditions, etc. Albeit at an initial phase, new surveillance action proposals are being implemented in the SUS by the Ministry of Health and Health State Departments that include the establishment of a National Surveillance System (Sistema de Vigilância Ambiental – SINVAS), structured as an interconnected set of public and private institutions and components of the Unified Health System encompassing the Union, States, Cities and Federal District.

The approach to these issues in Collective Health through its different disciplines/fields of practices, especially Epidemiology, faces additional challenges that include knowledge of new methodological and technological approaches, both for evaluating the presence of different risk situations in the environment,
and for diagnosing events such as accidents and diseases that frequently do not present a known clinical/epidemiologic/toxicologic profile. Brazil, also lacks an Environmental Health policy to guarantee the expansion, among others, of financial and material resources, in addition to qualified human resources to carry out teaching, research and prevention actions for situations of risk, and care of individuals whose health has been affected by adverse environmental conditions.

Concern over these issues could hardly fail to have grown in the Collective Health area and may be proven by the discussions and studies held in the latest Epidemiology and Collective Health congresses organized by the Brazilian Graduate Association in Collective Health (Associação Brasileira de Pós-Graduação em Saúde Coletiva) – ABRASCO, which ended with the proposal to create a Thematic Group in Environmental Health in September 2000 at the ABRASCO assembly held at the VI Brazilian Congress of Collective Health, in Salvador, Bahia.

This Health Environment working group, coordinated by Prof. Lia Giraldo Augusto, prepared eight articles based on the conceptual and methodological issues discussed in March 2002 in a workshop held in Curitiba for the V Brazilian Congress of Epidemiology. They include general discussions on: conceptual, political and methodological landmarks in Environmental Health as the three focal points identified as the references of the first meeting of the working group; methodological issues for evaluating the effects on health caused by air pollution; information policies in Environmental Health; utilization of biomarkers for assessing exposure and risk for chemical pollution; information on characterizing exposure and effects on health in the design of epidemiological studies; uncertainties in characterizing the risk and development of actions in Environmental Health; exposure to mercury and lead in Amazônia; and, building upon the studies of Prof. Miltom Santos, a revision of the goal of Epidemiology taking into consideration individuals’ specificities,
including geographical/environmental characteristics. The texts represent an initial contribution of the Health and Environment working group to ABRASCO and comprise the present Supplement of Revista Brasileira de Epidemiologia.