DEVELOPMENT OF INDICATORS FOR MONITORING THE IMPLEMENTATION OF INTERNATIONAL COMMITMENTS TO REDUCE HEALTH IMPACTS OF ENVIRONMENTAL FACTORS IN THE WHO EUROPEAN REGION

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Background and Aims: The WHO European Centre for Environment and Health develops and maintains the Environment and Health Information System (ENHIS) which entails indicators of exposure to and population health effects of priority environmental factors and related policy actions. ENHIS is being expanded in order to monitor the implementation of the commitments of the Fifth Ministerial Conference on Environment and Health in Europe (Parma, Italy, 2010) focusing on the protection of children's health.

Methods: Initial indicator proposals were developed by international experts focusing on the time-bound Parma Conference commitments. A minimum set of indicators to enable monitoring of these commitments was selected at a WHO technical meeting using a structured indicator evaluation approach. Current efforts concentrate on refining indicator methodologies and implementing pilot projects in selected countries.

Results:Indicators characterizing the school environment include access to properly maintained sanitation facilities, hygienic practices, mode of transportation to school, smoking in schools and on school grounds, exposures to dampness and moulds, ventilation rate in classrooms, and exposure to indoor chemical air pollutants, such as formaldehyde and nitrogen dioxide. These indicators require a periodic survey of schools across the European Region. The survey will employ a randomized clustered sampling design and be based, to the extent possible, on the existing national and international monitoring efforts to minimize the costs. New biomarker-based indicators are designed to characterize temporal trends in early life exposure to selected chemical pollutants. Policy indicators relying on national-level surveys will provide insights into actions and regulations aimed at reducing exposure to harmful environmental factors and promoting healthy behaviours.

Conclusions:ENHIS will rely on standardized application of surveillance and epidemiological methods across Europe, and serve as a main source of information on the effects of Parma commitments implementation. A baseline assessment report will be released in 2013.