Implementing the Environmental Health Information System in the Czech Republic

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To establish an Environmental Health Information System is a challenge in Europe. The long-time effort led into establishing the party network and development of basic elements of the EH Information System within the project ENHIS (Establishment of Environmental Health Information System) coordinated by WHO Environmental Health Centre, supported by EC-DG Sanco, and entered by 18 European countries. It represents an indicator based system focused on child population. European countries are appealed to implement the EH information systems on the national levels with aid of methodologies and tools developed in the frame of ENHIS. In such way, the comparable and comprehensive information supporting policy making and progress monitoring will ensue. Also the Czech Republic took part in the international effort towards developing the basis of the Information System in Europe. Besides that it is one of the tasks resulting from the Budapest declaration, the EH Information System is also one of the priorities of Biannual Cooperation Agreement between WHO Regional Office and the Czech Republic (BCA).

**EH Monitoring System – a starting point**

Since 1994, there has been performed the Environmental Health Monitoring System in the Czech Republic. This is a comprehensive system of collection, processing and evaluation of data on environmental contaminants and negative factors, and their effects on population health in the Czech Republic. The Monitoring System has been operated as set out by the Governmental Resolution from 1991. It is one of the priorities of the National Environmental Health Action Plan. The monitoring data provide important background information for the long-term policy program „Health 21” focused on improvement of population health in the Czech Republic, as well as for other health protection and promotion policies.

The EH Monitoring System provides a solid ground for the EH Information System implementing. The indicators collected within the Monitoring System are those concerning human exposures to environmental risk factors from outdoor/indoor air, drinking water, foodstuffs, urban soils, selected linked health effects, and the internal doses followed-up through human biomonitoring.

Nevertheless, these indicators constitute only a part of the core set of 26 children indicators suggested by the ENHIS project. According to the feasibility study realized in the Czech national terms, with only few exceptions all indicators from the proposed core set are available - two thirds within competency of Ministry of Health, the rest of indicators within other departments.

Not solely children indicators are intended to be collected; the total population indicators and also those concerning the healthy ageing are in focus.

**Progress in IS implementing**

In October 2007, the gradual steps towards EH Information System implementation were discussed on the 33. meeting of the Czech Governmental Council for Environment and Health in October 2007. Establishing intersectoral member network and cooperation group has been in progress.

The first three uniformly structured national fact sheets on the selected topics based on ENHIS methodology have been finished and presented on the meeting with the Chief Public Health authority representatives in NIPH. During 2008, another fact sheets will be subsequently elaborated to be presented to policy makers. The national fact sheets are available on the NIPH Environmental Health Centre web pages www.szu.cz/chzp.

**Fact sheet - Asthma and allergies in children**

**Key message:** In the last decade, the number of children with allergic disease increased almost twice in the Czech Republic: from 17% in 1996 to 32% in 2006. The most frequent diseases are pollen-related allergic rhinitis and atopic eczema. The number of children with asthma has also been growing; there was 6% of asthmatic children in 2006 which is twice as high as in 1996.

**Fact sheet – Population exposure to particulate matter**

**Key message:** In 2006, almost 80% of the population in the monitored cities with measurement lived in places where the air quality limit for PM10 was exceeded. Exposure to suspended particles can be characterized as being widespread and long-term while mean values are gradually growing. The most significant health burden from urban air pollution is related to traffic emissions; a significant local contribution is made by industry mainly in the region of Ostrava – Karviná.

**Fact sheet – Blood lead level in children**

**Key message:** Since 1999, a downward trend in blood lead levels has been observed in children as well as in adult population. In 2006, the health relevant blood lead level 100 µg/l was not exceeded in any of the followed-up children. While in 1996 more than 15% of children had blood lead level higher than 50 µg/l, in 2006 it was only 2%.