

intro

The European Commission is preparing a pilot project

to explore ways of harmonising methodologies, stimulating knowledge sharing and creating synergies in the field of human biomonitoring (HBM).

It calls upon the national authorities to take ownership of this pilot project and mobilise their citizens.

Measuring pollutants in human tissues and fluids

rather than in soil, water, air or food is one of the most reliable ways of assessing to what extent we are exposed to environmental substances.

HBM is the key to integrating human health considerations into the environment policy decision-making and evaluation process.

Developing a coherent approach to HBM is one of the main priorities of the European Union Environment and Health Action Plan 2004–10.

For the full potential of HBM to be exploited

for the benefit of the EU population as a whole, HBM data must be coordinated at European level and cross-checked with toxicological, epidemiological and environmental data. More research needs to be carried out on human biomarkers, while the ethical and communication framework needs to be further developed in relation to HBM.

Do you want to know more?



European Commission website:
ec.europa.eu/environment/health/index_en.htm

ESBIO and Implementation Group web-sites:
eu-humanbiomonitoring.org
HBM-inventory.org

© European communities, 2007
© of photos: Photodisc
Printed in Belgium



Printed on recycled paper that has been awarded the EU eco-label for graphic paper (<http://ec.europa.eu/environment/ecolabel>)

Human Biomonitoring

Breaking the divide between environment and health

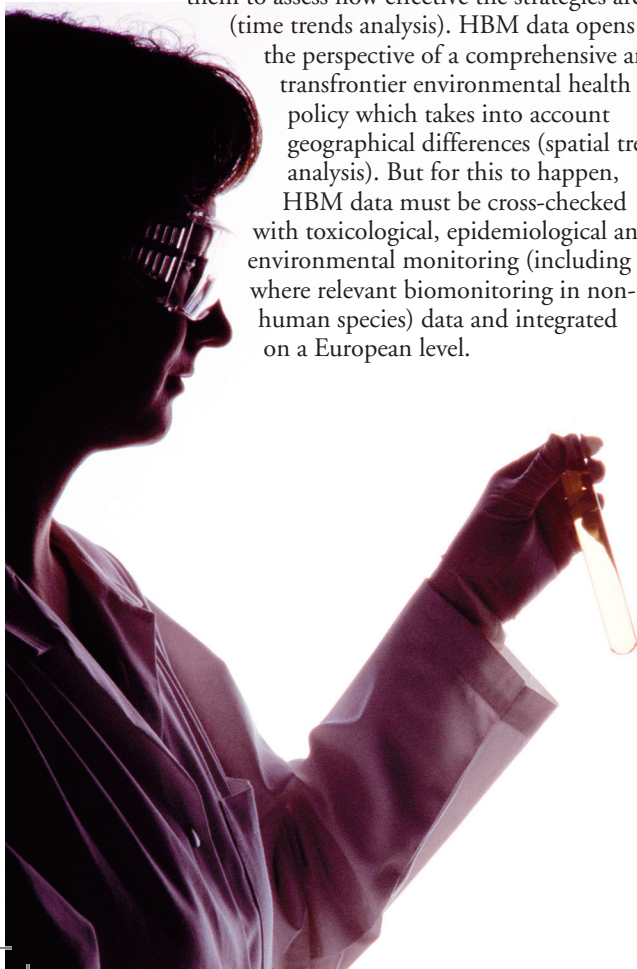


Human Biomonitoring (HBM) is an important way of integrating environment and health

HBM is the most appropriate technique to directly measure total human exposure and uptake of environmental pollutants at a specific point in time. HBM data is a more reliable way of measuring total exposures than estimations based on measurements and modelling of pollutant concentrations in soil, water, air, food and consumer products.

HBM helps policymakers

HBM data can be used to fine tune or even launch environment and health policies. It allows policymakers to identify priorities. It provides early warning on potential threats and enables them to assess how effective the strategies are (time trends analysis). HBM data opens up the perspective of a comprehensive and transfrontier environmental health policy which takes into account geographical differences (spatial trends analysis). But for this to happen, HBM data must be cross-checked with toxicological, epidemiological and environmental monitoring (including where relevant biomonitoring in non-human species) data and integrated on a European level.



Current fragmentation of HBM activities in the Member States leads to efficiency loss and waste of resources

Indeed many Member States run their own HBM programmes and activities but in doing so, they follow different methodological approaches. As a result, it is impossible to compare data from one country to another and to draw conclusions for the EU population as a whole. A common approach at EU level is therefore required.

HBM is a promising tool but many obstacles must be overcome before it reaches its full potential

For many pollutants, interpretation of health significance is still hampered by the lack of toxicological and medical information. More research also needs to be carried out on human biomarkers. Internal levels cannot be directly linked to the external exposure source. And because HBM has to do with people, an ethical and communication framework has to be further developed in order to ensure that HBM respects ethical and privacy considerations.

The European Commission proposes to develop a coherent approach to HBM in Europe in close cooperation with the Member States

EU coordination of HBM activities will make for a more targeted and cost-efficient European environment and health policy. It will provide policymakers with more comparable and accessible information both within and between countries. It will assemble all available knowledge and stimulate exchange of experience between teams and countries (capacity building). This in turn may enable a more effective use of resources and the development of a common European set of tools and strategies. Finally, it will make it possible to detect population groups with high levels of environmental exposure and lead to health strategies on better environmental equity.

A lot of progress has been achieved so far

The EU coordinated approach is based on the expertise and experiences accumulated at national level. An EU pilot project will be launched in close cooperation with Member States to develop and test the tools that are required in view of harmonising and coordinating methodologies on a European level. It will also identify possible pitfalls, facilitate the creation of collaborative networks and make it easier to share methodologies and data.

In the run up to the pilot project, the European Commission has set up a multidisciplinary working group — the Implementation Group, consisting of HBM experts from EU Member States and others such as Croatia. To support the Implementation Group and provide it with answers to scientific questions related to the pilot project, the Commission launched the ESBIO (Expert Team to Support Biomonitoring) project in October 2005. The Implementation Group has prepared 'Recommendations' for the Member States and for the Consultative Group on Environment and Health. This Consultative Group was established under the European Environment and Health Strategy. It consists of 50 Member States representatives and 50 representatives of major stakeholder organisations.

Member States' active support and involvement is needed to launch the European pilot project

Strong involvement and support from all Member States is essential. They must take ownership of the pilot project and get their citizens involved. Only then will the European Commission be in a position to launch the pilot project under the most favourable auspices. To this end, the Implementation Group is focusing on the interface between science and policy. It keeps the representatives of national governments posted on the progress achieved and on the need for decisions, with a view to garner widespread support.