Welcome to the first Newsletter of the WHO Chemical Risk Assessment Network.

Chemicals play a vital part in our daily life. Chemicals can also cause unintended harm to human health. More than 25% of the global burden of disease is linked to environmental factors, including chemicals exposures. The production and use of chemicals continues to increase worldwide, particularly in rapidly developing economies. Enhanced global efforts are needed to share expertise, to assess, and to manage the risks associated with exposure to hazardous chemicals. There is a need to identify knowledge gaps and emerging issues, and to provide a forum for scientific exchange and collaboration on risk assessment.

To support these efforts, the WHO Chemical Risk Assessment Network has been launched. This network of leading risk assessment institutions from around the world has the overall goal of improving chemical risk assessment globally through facilitating sustainable interaction between institutions on chemical risk assessment issues and activities.

Chemical Risk Assessment Network Homepage: www.who.int/ipcs/network/en

Latest Publications

Setting the research agenda on the health effects of chemicals

In 2011, World Health Organization (WHO) scientists reported that a significant percentage of global deaths and disability-adjusted life years (DALYs) in 2004 could be attributed to chemicals. Authors of the article reviewed the research needs published in WHO Environmental Health Criteria (EHC) documents, Concise International Chemical Assessment Documents (CICADs) and WHO documents on 10 chemicals of major public health concern and identified common themes. These themes include biomarkers, longitudinal epidemiological studies, mechanisms of disease, reproductive and developmental effects and exposure assessment.

http://www.mdpi.com/1660-4601/11/1/1049

New developments in the evolution and application of the WHO/IPCS framework on mode of action/species concordance analysis

The World Health Organization/International Programme on Chemical Safety mode of action/human relevance framework has been updated to reflect the experience acquired in its application and extend its utility to emerging areas in toxicity testing and non-testing methods. The framework’s scope has been extended to enable integration of information at different levels of biological organization and reflect evolving experience in a much broader range of potential applications.


Aircraft disinsection insecticides

The spraying of insecticides on board aircraft to prevent the inadvertent transport of mosquito vectors (and the diseases they transmit) into countries where they were not previously found is known as aircraft disinsection. WHO has published a risk assessment model for these insecticide products, along with an evaluation of product types currently available or in development. The publication (in the Environmental Health Criteria Series) aims to assist national authorities to evaluate new and existing products for disinsection.


CICAD 78: Inorganic chromium(VI) compounds

WHO has published a Concise International Chemical Assessment Document (CICAD) on chromium (VI) compounds (also known as ‘hexavalent chromium compounds’). These

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compounds have been associated with serious adverse health effects in workplaces (including lung cancer), and with contamination of the environment and drinking-water supplies via industrial wastewater. The publication provides summaries of relevant scientific information and aims to characterize the hazard and dose-response from exposure to these chemicals. 

http://www.who.int/ipcs/publications/cicad/cicad_78.pdf

Identifying important life stages for monitoring and assessing risks from exposures to environmental contaminants: Results of a World Health Organization review

Age- and life stage-related changes in behaviour and physiology are important considerations in chemical risk assessment. An article from a group of experts convened by WHO summarizes these factors and proposes a harmonized set of early life age ranges for monitoring and assessing risks from chemicals. 

http://dx.doi.org/10.1016/j.yrtph.2013.09.008

First Network Meeting to be Hosted at ANSES

The first face to face meeting of the WHO Chemical Risk Assessment Network will take place on 8-10 October 2014 and will be hosted by ANSES (French Agency for Food, Environmental and Occupational Health & Safety) at their premises, located in Maisons-Alfort, a suburb of Paris. Network Participants will receive details of the arrangements by email. The overall goal of this first face to face meeting is to establish how the Network will progress its objectives over the coming years, including establishing the Network’s future Business Plan to support the work of the Network towards those objectives over the short to medium-term.

ANSES is a French government institution accountable to the Ministries of Health, Agriculture, Ecology, Labour and Consumer Affairs, employing 1350 staff and managing a network of reference and research laboratories as well as convening a range of expert groups and committees. ANSES undertakes monitoring, expert appraisal, research and reference missions in a broad field of competence that encompasses human health (environmental health, occupational health, food safety, nutrition), animal health and welfare, and plant health.