

Ciné-ONU and the Goethe Institut are proud to present

Underkastelsen

About the film:

Submission is a documentary about the 'chemical society' - a society we have been building since the Second World War. Since 1945 the amount of chemicals we use has increased from 1 million tons to 500 million tons per year. The film focuses on the effect chemicals have on our bodies and our health. Unlike other documentaries which focus on the chemicals in our food, Submission investigates the chemicals we are exposed to in our daily lives, such as softeners (phthalates), flame retardants (PBDE) and surfactants (PFOS, PFOA). In addition to investigating the chemicals found in our bodies, we are invited to share insights from various experts into the consequences of those chemicals for the world surrounding us and our unborn children.



"One of the most important films of the century"

Michael Stanley-Jones, United Nations

Our Speakers:



Lisette van Vliet - Senior Policy Advisor on Chemicals and Chronic Disease Prevention for the Health and Environment Alliance

Lisette van Viet holds a Ph.D. in international relations and environmental studies from the Australian National University in Canberra. She joined HEAL as a Toxics Policy Advisor in 2005, and represents HEAL in REACH, and other EU laws and policies on harmful chemicals such as phthalates, mercury and endocrine disruptors. She represents the expertise of HEAL members and partners on these topics to the EU institutions, sitting on a number of EU expert, research and stakeholder groups including: the European Chemicals Agency Member State Committee, the EU EDC Ad Hoc Group, and the EU Human Biomonitoring project COPHES. Ms van Viet also conducts outreach to various groups on the links between environmental contamination and chronic diseases, such as cancer and reproductive health problems, and their prevention through environmental policy measures.



Roberto Bertolini - WHO Representative to the EU and Chief Scientist of the WHO Regional Office for Europe

Roberto Bertolini, M.D., M.P.H. is WHO Representative to the EU in Brussels and Chief Scientist of the WHO Regional Office for Europe. Dr Bertolini holds a degree in medicine and a postgraduate degree in paediatrics, as well as a Master in Public Health which he obtained from the Johns Hopkins University in 1983. His main professional interests concern the environmental influences on health, with special reference to the effects of emerging threats such as climate change, health effects of lifestyle and socioeconomic determinants including tobacco, alcohol and nutrition, the use of epidemiology for public health policy development and evaluation of public health programmes and practices.

Exposure to chemicals: a major public health problem

A few words about chemicals in our daily environment

Chemicals, whether of natural origin or produced by human activities, are part of our environment. Naturally occurring chemicals include arsenic and fluoride in drinking water, suspended particulate matter and sulfur dioxide from volcanic emission or forest fires, or naturally occurring toxins. Manufactured chemicals include industrial and agricultural products such as pesticides, petroleum products, processed metals, and products of combustion such as toxic gases and particles from industrial emissions and burning of fuel. Some chemicals are manufactured for specific uses, while others are unwanted by-products, wastes, or products of combustion.

What we do not know

The continuous exposure to many chemicals including through air, water, food, or other media and products results in health impacts which have been well assessed, however little is known about the total disease burden related to chemicals. Although we have a -limited- knowledge for some chemicals, we do not know about the mixtures, which occur in our everyday environment. Due to the fact that we usually study single substances, we do not know if small concentrations of single substances interact together to create bigger effects than single substances alone.

Chemical effects on human health

WHO estimates that around 4.9 Million deaths (8.3% of world total) were attributable to environmental exposure and management of selected chemicals in 2004. The largest contributors include indoor smoke from solid fuel use, outdoor air pollution and second-hand smoke, with 2.0, 1.2 and 0.6 million deaths annually. These are followed by occupational particulates, chemicals involved in acute poisonings, and pesticides involved in self-poisonings, with 375,000, 240,000 and 186,000 annual deaths, respectively. These figures present only a number of chemicals for which data are available, therefore, they are more likely an underestimate of the actual burden.

Chemicals effects on children

Another dimension of chemicals effects on human health is the potential link between neurodevelopmental disorders in children such as attention deficit disorder, mental retardation or cerebral palsy and industrial chemicals. A few industrial chemicals (lead, methylmercury, polychlorinated biphenyls [PCBs], arsenic, and toluene) are recognized causes of such disorders and the recognition of these risks has led to evidence-based programmes of prevention. However there still a lot of substances not yet assessed: out of 200 substances that have been proven neurotoxic to adults, only 5 or 6 have been tested and assessed for neuro-developmental abnormalities in children.

A big burden for the developing world

The issues of chemical waste management -usually carried out through developing countries- and the role of chemicals in health emergencies (when exposure to chemicals is proven to be the cause of serious diseases and deaths) should also be taken into consideration in our approach to this major public health problem. It is obvious that the research agenda should include more chemicals so as to provide the data needed to correlate chemicals to diseases and support evidence-based public health interventions at national and international levels.