KEYNOTE SPEAKERS

HEALTH IMPACT OF CLIMATE CHANGE – MAJOR CHALLENGE OF THE 21ST CENTURY

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The 4th Assessment Report of the International Panel on Climate Change emphasised that recent studies produced more confident assessment of the relationship between observed warming and its impact than was made in the Third Assessment. It is well known that the average global air temperature rose by around 0.6 °C over the twentieth century and the 1990s was the warmest decade in the last 100 years.

Projected climate change-related exposures are likely to affect the health status of millions of people, particularly those with low adaptive capacity, through:

- increases in malnutrition and consequent disorders, with implications for child growth and development;
- increased deaths, disease and injury due to heat waves, floods, storms, fires and droughts;
- the increased burden of diarrhoeal disease;
- the increased frequency of cardio-respiratory diseases due to higher concentrations of ground level ozone related to climate change; and,
- the altered spatial distribution of some infectious disease vectors.

The major health related problems for Europe are the followings: spatial shifts and temporal changes in blossoming of allergenic plant species, health impacts due to heat waves. One must consider the increased risk of inland flash floods, and more frequent coastal flooding and increased erosion. Increased UV exposure – levels of UV radiation reaching the due to sunnier summers, a decline in cloud cover (as well as ozone depletion) will increase the risk of skin cancer. Concerning vector borne diseases there is an increased risk of tick borne encephalitis, Lyme disease, West Nile virus and Hanta virus infection. Leishmaniasis will appear as a new threat north of the 45 ° latitude. Higher temperatures in summer could considerably increase the incidence of food borne *Salmonella* infection. Climate change might increase levels of *Cryptosporidium* and *Campylobacter* in water.

The global and national climate change strategies should put an emphasis on the elaboration of adaptation measures. The World Health Organisation (WHO) has identified a range of policy measures to minimise the health impacts of climate change.