

**WHO AGREES ON HEALTH AND CLIMATE CHANGE RESEARCH AGENDA**  
**WHO Virtual Press Conference Geneva/Madrid**  
**8 October 2008 - 14h**

**Introductory statements by our three distinguished speakers in Madrid, Spain following the agreement of the WHO's research agenda on climate change and health**

**Dr Idelfonso Hernandez, Director General, Spain Public and Foreign Health, Ministry of Health and Consumer Affairs:**

Good afternoon – I am very pleased to say that our government is very pleased to host this meeting here and in particular the Ministry of Health because our government is very committed to sustainability and also committed with inter sectoral work and our Minister of Health is committed to put health in all policies of our government.

We are also committed to cooperate with other countries and developing countries in health and to support policies that in one hand contribute to sustainability and climate change and on the other hand to have results in terms of health, and also to give inputs to the research agenda will contribute to give input of intelligence to our government and to our policies. Thank you.

**Dr Maria Neira, WHO's Director for Public Health and Environment Department**

Hello everybody. Today is a very big day for the health international community and the international community. Here in Madrid WHO has convened a meeting to define a global meeting to define the agenda of climate change and public health agenda and happy to report back to you that this research agenda has been defined. We are very pleased to the collaboration of the Ministry of Health from Spain to host the meeting and we are very pleased to report to you that more than 80 top researchers from all places around the world met here in Madrid to talk about climate change and health. We were as well joined by representatives of donors and other UN agencies and the important thing today is that, as I mentioned, this global research agenda on how to protect health from climate change is now defined. Essentially our plan aims to speed up, focus and intensify climate change and health research because we want to provide the best possible scientific evidence base for governments to take action to take collective actions to take protective action to protect the health of the people from climate change. Among the major strategic lines that the top researchers are giving to WHO we were able to identify 5 major research agenda items for the future.

1. How climate change will interact with other health determinants and trends. Climate change certainly does not act in a vacuum, and there is an urgent need to better understand how climate change will interact with other important health determinants and trends and we are

thinking on the economic development, globalization, urbanization, and inequities particularly. Then were looking aswell on

2. Direct and indirect effects of climate change and health. There is a lot of knowledge now but the importance of this meeting was to put together all the research initiatives and make sure we are not missing anything, we are not missing any gaps, and we make sure we drive the research agenda on the most action oriented way and in the most cost effective and cost efficient way in order to better serve the countries.
3. We were looking at comparing effectiveness of short term interventions. This research agenda will be very much action oriented and providing guidance to governments and therefore we needed to look at the most effective ways to address challenges caused by climate change to the health community and beyond the health community. And also something very important was to
4. Assess the co-benefits for health that will be generated when you engage on an agenda to reduce or to fight climate change and clearly this will provide very strong arguments for governments to engage on a more preventive public health strategy in contacting and putting together all the factors contributing to generate healthy environments.
5. I think this meeting made an extremely important step forward and we have now a way a defined agenda that WHO will take now back to the World Health Assembly, to the Ministers of health and others, and make sure those recommendations will provide the best possible guidance for implementation at country level.

So we are very pleased and very happy of the results of this meeting.

**Professor Tony McMichael, Australian National University and Chair of the Conference:**

Hello its Professor Tony McMichael here and and I'm from the Australian National University in Canberra, Australia and I've been chairing this meeting for the meeting here for the last two and half days. Dr Neira has given a very clear summary of the main issues we discussed at the meeting and I would just reiterate as someone who has been working in this field for over a decade in this research field, this new and complex research field for now over a decade. This meeting has been a very important step, a major step in bringing together a number of researchers from around the world, and in particular providing a framework for a systematic international research and the development now of policy advice to national government around the world to take the immediate actions that we now realize are necessary to begin to lessen the risks of health to climate change and health that are already occurring and of course as the experts tell us will continue to occur over the coming decades.

I was very pleased at the breath of the representation at this meeting not just in terms of the range of research groups but the numbers of countries and regions that were represented and the number of international agencies that are beginning to recognize the importance of the impacts of climate change on human well-being and health and how to it effects the work that they are trying to do

with respect to social and economic development and the reduction of inequalities in the world and the achievement of the Millennium Development Goals.

We also had representation of donor agencies that would fund research and who are beginning to realize that this must be a very important part of their funding agenda, their portfolio over the coming decades. So the meeting has been important in all those respects, in bringing us together, providing a clearer framework for international collaboration and research and in particular the provision of practical advice to government to begin to take those steps to lessen the risk particularly for the most vulnerable sections for their populations.

The other part I would stress is that a major task force in carrying out this work research, this assessment of the risks to health is to have our societies all around the world understand the full range of potential consequences from climate change. I think if we can all have a clear understanding that it presents a significant threat to our own well being and health then we will begin to understand the truly serious nature of climate change are quite unprecedented, and quite extraordinary environmental stress on human society. So as I say its been a very satisfying meeting, and we have a clear plan of action now and we hope that they are going to facilitate immediate action at global, national and local levels to protect the health of populations both immediately and of course via a slowing and a reduction in the climate change process for the health of the future generations.

That's all I want to say and offering my summary comments.

#### **QUESTIONS AND ANSWERS:**

**QUESTION: I'D LIKE TO KNOW IF THERE ARE SOME WORKING DOCUMENTS OR A FINAL MANIFESTO THAT IS COMING OUT OF THIS AND HOW IT WILL BE IMPLEMENTED. WHERE DOES IT GO FROM HERE ?**

ANSWER by Prof McMichael ... Yes there will certainly be a very substantial document will come out that will provide clear guidelines to national governments on how they should carry out the assessments of the risks to help their population and then how they should develop and evaluate the adaptive strategies to provide a level of protection in the first instance as we all take longer term action to slow the process of climate change itself.

**FOLLOW UP QUESTION: YOU SAID A FINAL DOCUMENT WILL BE COMING OUT... SO WHEN WILL THIS BE READY AND WHERE DO WE GO FROM HERE.**

ANSWER BY Dr Maria Neira: Well immediately we will be preparing a document that will go to Members of the Executive Board of the World Health Organization and then from there, if approved, it will go to the World Health Assembly in May. In parallel, definitely, we will edit the

final document of this meeting and we will be available very, very soon at least a summary and definitely the whole paper. We are thinking as well on producing an editorial for one of the major journals and before we are committed to having this information available and it will be ready very very soon.

### **QUESTION HOW WILL WHO'S RESEARCH AGENDA SHAPE FUTURE DIRECTION?**

ANSWER BY DR MARIA NEIRA ... We have a major role to play here in different areas.

First of all we would like this research plan to create a global platform and make sure that we rapidly strengthen evidence in the health implications of climate change and particularly the most effective and protective measures.

We would like this plan to also to be used to make sure that we scale up action on climate change and health research and we feed the process of the United Nations Conference of the Parties -- COP15 -- that will be held in Copenhagen in December 2009 where the global leaders will forge a new global climate change agreement to succeed the Kyoto Protocol and

Finally as well, we would like to make sure that in this plan, and in this research agenda that has been defined today will set up the road map giving specific guidance to governments, obviously for research institutions, and donors looking to take applied research action to fill critical knowledge gap. Fundamentally these three strategic directions that we would like to take into the immediate future.

### **QUESTION WHAT IS THE IMPORTANCE OF HEALTH IN THE CLIMATE CHANGE AGENDA**

ANSWER BY Professor Tony McMichael

Well, climate change presents risks to health via a very wide range of pathways. There are a number that we can easily understand -- these are the direct effects like extreme weather events and the climate scientists tell us we are warmer the world in many regions there will be an increased frequency and an intensity of things like floods and storms and cyclones and in my country, Australia, extreme bush fires, more extended droughts and they are all familiar with the health risks from the extremes of heat, daily temperature, heatwaves kill people, and all these cause serious illness and some hospitalization, and we are an increased risk as the frequency and intensity of heatwaves in most parts of the world increases. A number of the air pollutants that occur in our major cities will form more readily at warmer temperatures and will be also effected by changing in patterns of wind and therefore the distribution of pollutants. So those are some of the direct effects.

We think in the immediate and longer term and the more serious risks to health will arise as a result of the adverse effects of also climatic conditions and in many parts of the world dryer conditions on food production with problems of malnutrition and adverse effects on child development.

We also know that a large number of infectious diseases are very sensitive to the climatic conditions, so for example food poisoning from Salmonella is very much a summer time problem, and in a warmer world will tend to occur more frequently. Many of the tiny species like mosquitos and ticks that spread infectious diseases like dengue fever, malaria, west Nile fever and dozens of others are very sensitive too, to temperature, to rainfall, to humidity and we know many of those will change their patterns of occurrence and perhaps extend their seasonal range. So those are a number of health effects that we understand and fairly clearly.

We are also concerned that there will be wide range of adverse effects on mental health not just from extreme weather events and disasters but loss of jobs, displacement of coastal populations in small islands States as we see sea level rises, so mental health problems and problems of just conflict, demoralization and social instability. All of these things in refugee and displacement of populations in vulnerable parts of the world will have a range of health consequences. So it is a very long list. Some of these are already occurring and others we anticipate will increasingly appear in the coming several decades.

**QUESTION ... Can you give us an idea of the gaps in the knowledge and gaps which were identified in the course of the last few days?**

**Answer by Professor McMichael:** Well there are a number of gaps in knowledge that we talked about. One which is quite basic problem that we face that most of the research that has been done over the last decade has been done in the richer countries, the developed countries. Yet we know in general the risks from climate change to health will be greater in the lower income and the poorer countries particularly those that are in geographically vulnerable regions of the world. So we need to redress this imbalance and fill in the gaps in knowledge in relation to those many other countries.

Also within all countries there has been little research so far to try and understand which parts of the population, which sub-groups have the greatest risk from climate change. So we must understand better the variations in vulnerability. I think the other gaps we talked about are related particularly to our understanding the relative effectiveness of different forms of adaptive response of interventions to reduce the risks to health. We are going to need to link up a number of different research disciplines of the health scientists with the economists and the social scientists and indeed the political scientists to help us understand what types of interventions will be most feasible, most effective and most affordable. So those are some of the main gaps that we identified at this meeting and that will be a very important part of the research agenda in the next several years.

**QUESTION HOW WILL THIS RESEARCH AGENDA HELP COUNTRIES IN RESPONDING MORE ADEQUATELY TO THE THREATS OF HEALTH AND CLIMATE CHANGE?**

Clearly WHO considers that the understanding of the threat that climate change posed to the environment and to health is now well understood and clearly demonstrated. Therefore what we have to do in response to the request by the Member States is to make sure that we put together the scientific community, the research community and we align and identify priorities and then we identify the most protective actions and the most effective interventions to protect the health of the people.

I think that the type of policy recommendation and guidance that we will be providing to the countries will be able to help them to reinforce their public health infrastructure at country level -- means they will be reinforcing their epidemiological surveillance capacity in order to better protect and anticipate potential increase on certain infectious diseases aggravated by climate change. Then we will put in place systems to better respond to those epidemics or natural disasters that will cause damage to the health of the people and in general to adapt to the health systems to better respond to those epidemics or natural disasters that will cause damage to the health of the people caused to climate change. In addition to that obviously this is adaptation part. But also we need to prepare them as well to be able to contribute -- as the health sector -- to the mitigation agenda which means that by identifying the co-benefits for health that an agenda on climate change will generate, we can further engage the health sector and even by using those health arguments we can even better motivate other health sectors to engage on activities to reduce carbon emissions for instance. It's a kind of win-win strategy that we need to promote at country level in order to move quickly on this adaptation and mitigation strategies for climate change.

**CAN YOU CONCRETELY SPELL OUT WHICH COMMUNICABLE DISEASES AND WHICH NON-COMMUNICABLE DISEASES WILL BE PRIORITIZED IN TERMS OF RESEARCH FUNDING GOING FORWARD?**

ANSWER BY PROF TONY MCMICHAEL: The list of communicable diseases is potentially a very long one and as I said a little earlier you are well aware there is a large and indeed a growing number of mosquito-borne infections -- for example -- that we know are sensitive to climatic conditions so inevitably since several of those are public health problems around the world and particularly in developing countries such as dengue fever and malaria, and in Africa schistosomiasis and so on... and leishmaniasis in South America. These are going to attract a good deal of research attention. Good old fashioned food poisoning is also going to attract more attention than it has to date-- in part because of the sheer burden of disease, in fact diarrhoeal disease remains in all countries, rich and poor but particularly in the poorer countries a major public health problem. In many of those poor countries the public health infrastructure is not doing well at the moment in terms of coping with diarrhoeal disease and as we have said several times climate change we anticipate is going to act as a multiplier for that particular public health problem. So it is clear those communicable diseases are going to receive continuing and increasing attention.

For the non-communicable diseases they have not been featuring as strongly in the discussion. We do know that the great majority of deaths occur in heatwaves for example are due to cardiovascular events or terminal respiratory conditions, so the underlying chronic cardio vascular disease are respiratory disease will be a problem for those populations particularly elderly members of population exposed to more or more intense heat waves. With respect to climate as a primary cause of non communicable diseases I think those pathways are not so clear. There are a number of interesting secondary effects are being discussed and which we have to recognize as actually part of the full story. There have been systematic assessment recently in Northern Canada where some changing health risks in the Inuit population there in part as a response the substantial warming that has occurred. We are talking about 2-3 centigrade warming in Northern Canada already, which as you would know, has led to a lot of losses on thermofrost and sea ice and has simply changed the natural conditions of sources of wild foods, traditional wild foods and that has contributed – the assessment tells us – had contributed to the changing patterns of physical activity and dietary intake and therefore a rise in obesity, diabetes and cardiovascular disease in that population. There are also the mental health problems which I referred to a little earlier something that is always hard to quantify but likely to be very substantial consequence obviously among communicable health problems in response to the destructive effects and in many parts of the world to the impoverishing effects of climate change.

So I think all those one's that I have mentioned will receive substantive attention as we now continue to clarify this agenda and settle down and do more and better work in some parts of the world that to date have not been well studied.

**AS A FOLLOW UP QUESTION PROFESSOR IF MAY... I WAS WONDERING IF YOU HAVE ANY PRELIMINARY ESTIMATES OF WHAT WOULD BE THE RESEARCH NEEDS, IN OTHER WORDS TO GOVERNMENTS AND DONORS, HOW MUCH MONEY YOU NEED TO PUMP INTO RESEARCH INSTITUTIONS TO FUND THE EFFORT HERE?**

Answer by Professor Tony McMichael: Well in some respects it is a how long a piece of string question... as researchers we have just as much money as governments are prepared to pump into these funding agencies. One thing I have to say up front is that a very great need will be in those developing countries where for the moment research capacity is relatively low and where the public health priorities take on a different profile as they have many more substantial immediate public health problems that must continue to be studied and addressed. So we are talking about additional funding on top of the funding that will be needed to strengthen the ongoing research and the building of the public health infrastructure in those countries. I think frankly what we've seen very very large sums of money going to basic climate science and climate change science in the last couple of decades and we are talking about tens and hundreds of millions of dollars that have gone into that area to help us understand better the process of climate change and then frankly given the significance of the threats that climate change presents to human well-being and human health and in parts of the world human survival. I think we need to talk similar sums of money over the next decade or two to develop a full understanding of what the range of consequences for the human

species will be from climate change. Of course I can't give an exact figure and as we talk exchange rates are falling in many parts of the world and the money is losing value.

**I WAS WONDERING WHAT MEASURES WERE DISCUSSED WITH REGARDS TO STRENGTHENING CAPACITY OF HEALTH SYSTEMS IN COUNTRIES LESS ABLE TO MONITOR THE EFFECTS OF CLIMATE CHANGE ON HEALTH IF ANYTHING WAS DISCUSSED OR DECIDED?**

ANSWER BY DR MARIA NEIRA... well the purpose of this meeting on defining the research agenda and in fact tomorrow morning we are opening another meeting in Geneva with representatives from the Member States where WHO will be defining the plan of action for implementing at national level the measures to protect the health from climate change. So we will be probably able to give you a global picture of what the national plan of action will be – the regional one and the global one including the research agenda that is needed for the whole exercise by January next year when we are reporting back to the Member States of the Executive Board of the World Health Assembly. Now which types of capacities we need to reinforce at country levels... and I mentioned this earlier, we want to reinforce the public health capacity at country levels in fact if we are trying to convince investors and donors this is a very sound agenda. We are requesting them to invest on public health, we are investing on disease control in cities, and protecting people and populations and investing in better equipping them on protecting health from climate change. The capacities are those related to the public health functions that normally operate at country level but particularly those countries the most vulnerable countries they have major difficulty to respond.

**QUESTION ... OF ALL THE RECOMMENDATIONS THAT HAVE COME OUT OF THIS DO YOU SEE ANY OF THEM PLAYING OUT IN THE POST KYOTO PROTOCOL. ANYTHING THAT YOU WOULD LIKE TO SEE BECOME MANDATORY?**

Well, if anything we would like to see the health component included in the post Kyoto protocol, definitely. That is why it is so important to define the research agenda because we want to feed that process. We want to make sure people understand that there is a very clear linkage between climate change affecting our health and the need for us to take action on that. The human face of the climate change agenda is not yet there and I think that this agenda and this research plan that we have in our hands will help us to make sure that after Kyoto world leaders will take into consideration the very negative implications for the health of the people if we don't take action on climate change.

**THANK YOU.**

**END**