



To the State Secretary for Housing, Spatial Planning and the Environment

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Subject: European Environment and Health Action Plan 2004-2010  
Your reference: -  
Our reference: U-52/EvV/RA/600-R1  
Enclosures: -  
Date: 27 January 2005

Mr State Secretary,

In this letter I would like to offer advice on how the Dutch 'Environmental Health Action Programme' 2002-2006 can, where necessary, be accommodated to the new European 'Environment and Health Action Plan' 2004-2010.

Discussions with your staff have shown that a report on this matter would be very welcome. Accordingly, I have included suggestions in this letter for the further development of the Dutch action programme, based in part on advice from the Standing Committee on Health and Environment. In the course of this consultation, the idea took shape of bringing to your attention international developments relevant to Dutch environmental policy. In view of the role of the Health Council of the Netherlands, it is naturally the scientific aspects that receive the most attention.

In writing this report I took into account the first progress report, which you submitted to the Lower Chamber of Parliament in May 2004. I am sending a copy of this letter to the Minister of Health, Welfare and Sport.

### Background

In 2002 the Minister of Health, Welfare and Sport and the Minister of Housing, Spatial Planning and the Environment began an initiative to strengthen policy on environment and health. This took concrete form in the 'Environmental Health Action Programme', which began in 2002 and will continue until 2006.

At your request the Health Council compiled two reports about that programme, namely 'Environmental health: research for policy' [2003/20E] and 'Environmental health: the assessment framework assessed' (*Gezondheid en milieu: beoordelingskader beoordeeld* [2004/03]). The first report covers subjects where there is good potential for collecting and integrating knowledge about



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 2  
Date: 27 January 2005

---

the influence of environmental factors on health. The second report evaluates an instrument for assessing environmental health problems. A third report, about ways of measuring environmental health, will appear in due course.

The EU recently launched an action programme with a comparable objective: the 'European Environment and Health Action Plan' [2004-2010]. In this action plan, the European Commission sets out a strategy for strengthening EU policy in the field of health and the environment. The strategy was called SCALE (*Science, Children, Awareness, Legal instruments, Evaluation*). In the interests of completeness the strategy and action plan are briefly summarized below.

The aims of SCALE are to reduce the burden of illness caused by environmental factors, to identify and prevent new environmental health threats and to strengthen policy in the field of environment and health. The action plan identifies thirteen tasks serving three aims. First, to make better use of information so that more links between environmental factors and health effects can be demonstrated; second, to close gaps in knowledge and reconsider existing policy and, finally, to improve communication about decisions and the reasoning behind them. In addition, the protection of the health of a special population group - children - received special attention.

These aims broadly agree with those of the Dutch action plan. The main difference is that while the European plan focuses on research and monitoring, the Dutch plan also places emphasis on reducing the health effects of environmental factors. The latter programme also implements the agreement made under the auspices of the WHO to draw up national environmental health plans.

What advice can the Health Council now offer for making the Dutch action plan conform to the European one?

#### Co-operation with other member states

The Dutch and European initiatives are broadly on the same track. Both place marked emphasis - in my view correctly - on strengthening the scientific underpinnings of policy. Various subjects have found a place in both action programmes, including the identification of environmental health problems, risk communication and monitoring - all areas of general importance. Additionally, both turn their attention to specific environmental compartments, such as the indoor environment and outdoor air, and to agents such as non-ionizing radiation and xenobiotic substances.



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 3  
Date: 27 January 2005

---

The Netherlands can achieve most in these areas by contributing to the co-operation between the European Commission and member states provided for in the EU action plan. Because this co-operation is possible at all levels, it can help in both the collection and interpretation of data and the exchange of policy experience.

#### Research into effects on children and the elderly

Threats to the health of children receive special attention in the European programme. The same emphasis emerged in the statement you and your European public health and environment colleagues recently gave in Budapest. The action plan accords well with this statement. In the first progress report on the Dutch action programme you indicated that particular consideration would be given to children in actions aimed at ensuring a healthy indoor environment and healthy human environment.

There are, however, gaps in our knowledge about the health risks to children associated with environmental factors. In its recent report 'Pesticides in food: assessing the risk to children' [2004/11E] the Health Council noted that standard toxicology testing cannot determine whether xenobiotic compounds pose extra risks to children. In the above-mentioned report 'Environmental health: research for policy' the council further recommended carrying out research into the relation between noise from air and road transport and the health and cognitive performance of children.

There are areas of policy, other than the environment, which focus on children as a special risk group. It is now more widely recognized that medicines intended for children as well as adults should be studied in a way tailored to this target group. The case for this was made in an observation from the Health Council in the annual report from the Centre for Ethics and Health, entitled 'Ethics and Health Monitoring Report' (*'Signalering Ethiek en Gezondheid 2003'* [2003/08]).

I propose that you look into how the research currently being promoted within the framework of the Dutch action programme could be redirected in the way just described, or extended to achieve the same ends.

A gloss needs to be placed on this proposal, however. There is a second vulnerable population group that needs to be taken into account in environmental policy. That is the elderly. Firstly, this is a group of considerable size. Moreover, elderly people are, on average, ill for longer and become more seriously ill than children and, for these reasons, weigh disproportionately in the total ill health of the population. As a result of demographic developments this component will



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 4  
Date: 27 January 2005

---

increase still further in the coming decades. Despite this, little is known about the effects of environmental factors specifically on the health of old people. I therefore recommend that you institute research into this, possibly within the framework of a second Dutch action programme. It also seems to me to be something that you could profitably bring to the attention of your EU colleagues.

#### International harmonization of environmental policy for four groups of disease and health effects

At the centre of the EU action plan stand four 'priority' diseases and health effects, namely chronic and recurrent disorders of the airways, cancer, neurodevelopmental disorders and endocrine disruption. For these diseases and health effects there is either proof or grounds for suspicion that environmental factors contribute to the problem. The EU action plan provides for the development of health indicators and further research into connections with environmental factors.

In view of the fact that these four groups of diseases and health effects also receive considerable attention in Dutch environmental policy, international co-ordination is necessary. Across the EU they are considered particularly relevant to the health of children. I find the emphasis on cancer, however, to be overplayed because childhood cancer is relatively rare. The situation is quite different for the other three priorities. Non-malignant disorders of the airways and neurodevelopmental disorders are far more common in children than cancer, and the possible consequences of endocrine disruption in children are insufficiently understood. In my opinion these three disease and health-effect groups deserve a great deal of attention. The Health Council is preparing a report on the contribution of environmental factors to asthma and allergies. That could provide building blocks for future policy and expose gaps in our knowledge.

#### More attention for risk perception and health education

The EU action plan is aimed at government measures by which harm caused to peoples' health by environmental factors can be reduced or prevented, and which enjoy broad support. According to the action plan this requires, firstly, more knowledge about the connection between environmental factors and health and, secondly, a better understanding of the population's perception of risk. In this way, the European Commission hopes to be able to inform the public about environmental



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 5  
Date: 27 January 2005

---

health problems in a more effective way. The Commission wishes, moreover, to use a better understanding of risk perception to influence peoples' behaviour regarding self-exposure to environmental factors they can influence themselves, such as excessive sunlight. In addition, this insight could also help bring to peoples' attention their role as polluters.

In my opinion it should be more widely appreciated that successful communication about risks has to be a two-way street. This was already pointed out in the Health Council's advisory report entitled 'Local environmental health concerns; risk communication, exposure assessment and cluster investigation' [2001/10E]. The participants at the EU congress that you and your colleagues held last month with the European Commission, and which served to further develop the action plan, came to the same conclusion. Furthermore, I think it is crucial that there is not only research into public risk perception but also into how much the various governments know about this perception. This is recognized in the Dutch action programme. In this connection research into factors that affect the effectiveness of communication about risks deserves a prominent place. This was recommended in the above-mentioned Health Council report.

The 'Assessment Framework for Health and the Environment' (*Beoordelingskader Gezondheid en Milieu*), which I have already mentioned, was developed in the context of the action programme. It provides the Netherlands with an instrument for making decisions about measures relating to environmental health problems. This instrument could also be of use in the EU decision-making process. It mainly has a structuring function, for helping to weigh decisions in areas of great uncertainty. Differences in risk perception between the parties involved in can be taken into account this in process. Further, a Health Council advisory report is in preparation concerned with precautionary measures and public health. That has the potential to provide starting points for approaching such problems.

#### Continuing focus on the indoor environment, outdoor air and noise

In both the Dutch and EU action plans a lot of attention is given to the indoor environment. This subject is exceptionally relevant in view of the large part of our time that we spend indoors and the often uncontrolled presence of harmful substances, and physical and biological agents in homes and workplaces. In my view, the knowledge gaps that the Health Council noted in this area in its report 'Environmental health: research for policy' [2003/20E] demand continuous scrutiny.



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 6  
Date: 27 January 2005

---

The same applies with the two other priority issues mentioned in the report: outdoor air and noise. They deserve, in my opinion, to form a separate theme - environmental health - in the next (seventh) EU framework programme for research, for which the preparations have already begun. This area provides scope for a whole range of environmental health issues that merit consideration for further research.

Noise has already been mentioned. Outdoor air quality was dealt with in the recent report entitled 'Baseline scenarios for the Clean Air for Europe' (CAFE) Programme from the International Institute for Applied Systems Analysis. By using scenario analysis they determined how much air pollution contributed to the ill health suffered by EU citizens. Air pollution will continue to create health problems for the next fifteen years. The effect of air pollution on life expectancy now (reduced by an average of nine months) and in the future (scenario-dependent reduction) underline how important it is that you and your EU colleagues continue to make efforts to reduce air pollution further. This is particularly important for the Netherlands because, according to the report, our country came near the top for air pollution in all the calculated scenarios. The most important factors are population density - by way of derived factors such as mobility - and industry.

This analysis is supported by the conclusions of a WHO-financed study, the final communication of which also appeared last year: 'Burden of disease attributable to selected environmental factors and injuries among Europe's children and adolescents'. This document contains figures on the contribution of environmental factors to the mortality and morbidity of children in Europe and the lands of the Caucasus. These population group-specific figures show that air pollution has a large effect on these variables. This was true for all three regions distinguished by the researchers, including one area that roughly corresponds to the EU.

The two reports support the need for measures to improve outdoor air quality. This validates the recommendations given in the previously mentioned advisory report 'Environmental health: research for policy'.

#### International harmonization of monitoring

Monitoring also appears in both programmes. The EU instigated monitoring health indicators and exposure and correlating the resulting data. This is where harmonization of the member states' own monitoring programmes, and the research activities based on them, could be very effective. It would make comparison of results within the EU possible. In some cases it would even be possible



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 7  
Date: 27 January 2005

---

to combine data sets. This could help to strengthen the evidence for a connection between an environmental factor and health. In this context, the European Commission also aims at an integrated European system for health monitoring and health information, one of the priorities of the current EU action programme in the field of public health.

In its report 'Health and the environment: monitoring options' (*Gezondheid en milieu: mogelijkheden van monitoring* [2003/13]), the Health Council recommended monitoring exposure to environmental factors already recognized as harmful, the detection and reporting of possible health effects from suspect environmental factors (screening) and verifying exposure situations and health problems where there is cause for concern. The report also gave general requirements that monitoring programmes should meet if they are to yield usable information. The Health Council argues for systematic monitoring of exposure in particular, as the possibilities for this have been developed further than health registers.

The recently published WHO (Europe) report entitled 'Development of environmental health indicators for European Union Countries: results of a pilot study' provides an overview of what has been achieved in the harmonization of exposure and health indicators within Europe. A set of indicators for aspects such as outdoor air quality, noise and housing (a category that includes the indoor environment) is considered suitable for implementation in the previously-mentioned information system.

I regard the proposed continuation of the EUROHEIS project 'European Health and Environment Information System for Exposure and Disease Mapping and Risk Assessment' to be of particular value. In the context of this project, various European countries have begun to correlate geographical information with data on health and exposure to environmental factors. The Dutch contribution to the effort was provided by the National Institute for Public Health and the Environment (RIVM). In this way, environmental health problems can be more easily recognized, allowing measures to reduce or eliminate the problem to be put into effect more quickly.

#### Stimulate monitoring by biomarkers

The EU attaches particular value to biomonitoring. This type of monitoring was left out of the Dutch action programme. The above-mentioned report from the WHO (Europe) also did not recommend any biomarker to be deployed at European level. Nevertheless, I would like to declare my support for it. The concentration of contaminants in body tissues such as blood can provide more accurate information about the body load than levels of pollution in the environment. The



Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 8  
Date: 27 January 2005

---

Netherlands already has a variety of measuring programmes running in order to track changes in body load.

In the advisory report that I mentioned, the Health Council proposed that these measuring programmes be extended to cover other substances and to begin a new programme in order to follow the exposure of vulnerable groups such as newborns. Biomarkers for health effects that are usable for monitoring are still lacking. What is missing here is the lack of the necessary validation.

In the same report, preconditions were set out that exposure and effect biomarkers must meet if they are to provide usable information. It also set out general requirements for monitoring programmes.

#### Further development of methodology

The EU is also making a concerted effort on methodological issues. It is investing in the development of methods for risk assessment and cost-benefit analysis. I find this methodological concentration of strength exceptionally worthwhile. This area also received much attention in the Dutch action programme, under the heading *Beleidsondersteuning* ('Policy support').

The Health Council will contribute to this with the advisory report on precautionary measures and public health and with a report on measurements for environmental health effects, which is also on the schedule of activities.

#### Continuing with integration of knowledge for the quality of the human environment

The connecting theme of 'quality of the human environment' in the Dutch programme receives no attention as such in its EU counterpart. The advisory report entitled 'Environmental health: research for policy' evaluates the current research into on this subject. That research aims to map out which environmental determinants influence health and to what degree they do so.

The study lends itself exceptionally well to integrating knowledge from the many sub-aspects of Dutch spatial planning and environmental policy. One aspect that immediately springs to mind is determining the damage to health that can be caused by combined exposure to noise and air pollution. Although the EU does not use the term 'human environmental quality', the European action plan stresses to just the same extent the way that added value can be gained from integrating knowledge. As far as I can see, the Dutch action plan does not at this moment need to be augmented.





Subject: European Environment and Health Action Plan 2004-2010  
Our ref.: U-52/EvV/RA/600-R1  
Page: 9  
Date: 27 January 2005

---

## Conclusion

To sum up, I recommend that your policy take account of the matters emphasized in this letter: population groups and diseases, communication about risks, the indoor environment, noise, outdoor air quality and monitoring, particularly biomonitoring. I further recommend trying to ensure that the EU's seventh framework programme will provide greater scope for research into environmental health issues than is the case in the current (sixth) programme.

## Epilogue

The EU action plan strongly emphasizes the need to make better use of existing structures and information. In this connection, you should know that the council's secretariat has begun inventorying the advisory bodies concerned with environmental health issues in other EU member states. This is a first step on the road to an EU-wide network of advisory bodies in this field. I expect this to raise the effectiveness and efficiency of environmental health policy.

Yours faithfully,

(signed)  
Prof. JA Knottnerus