EPHT CASE STUDY IN EUROPE: AIR POLLUTION AND HEALTH

Sylvia Medina

Coordinator of the French Surveillance System on Air Pollution and Health

Direction of Environmental Health, National Institute of Public Health Surveillance (Santé publique France), Saint Maurice, France

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APHEIS

Air Pollution and Health: A European Information System

Monitoring the Impact of Air Pollution on Public Health in 26 European Cities

Why Apheis?

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What's the problem we faced?

- Air pollution continued to threaten public health
- Key users still lacked appropriate information

What is Apheis?

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Created in 1999

Objective: translate epidemiological findings into decision-making tools and provide reliable, up-to-date and easy-to-use information on the effects of AP on health

Target audiences: policy-makers, environment and health professionals, NGOs, the general public

How Apheis planned to meet the information needs of its key audiences

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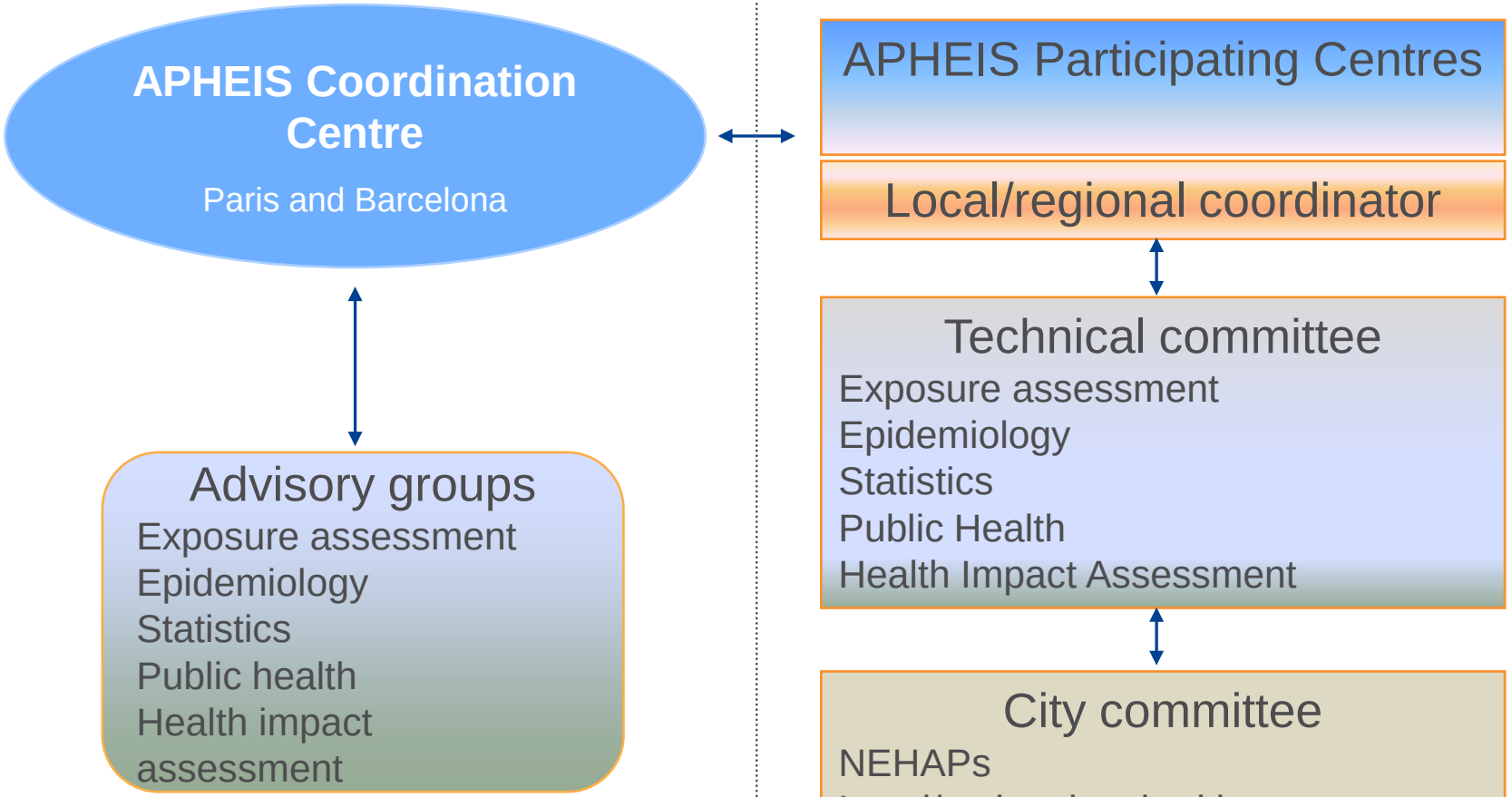
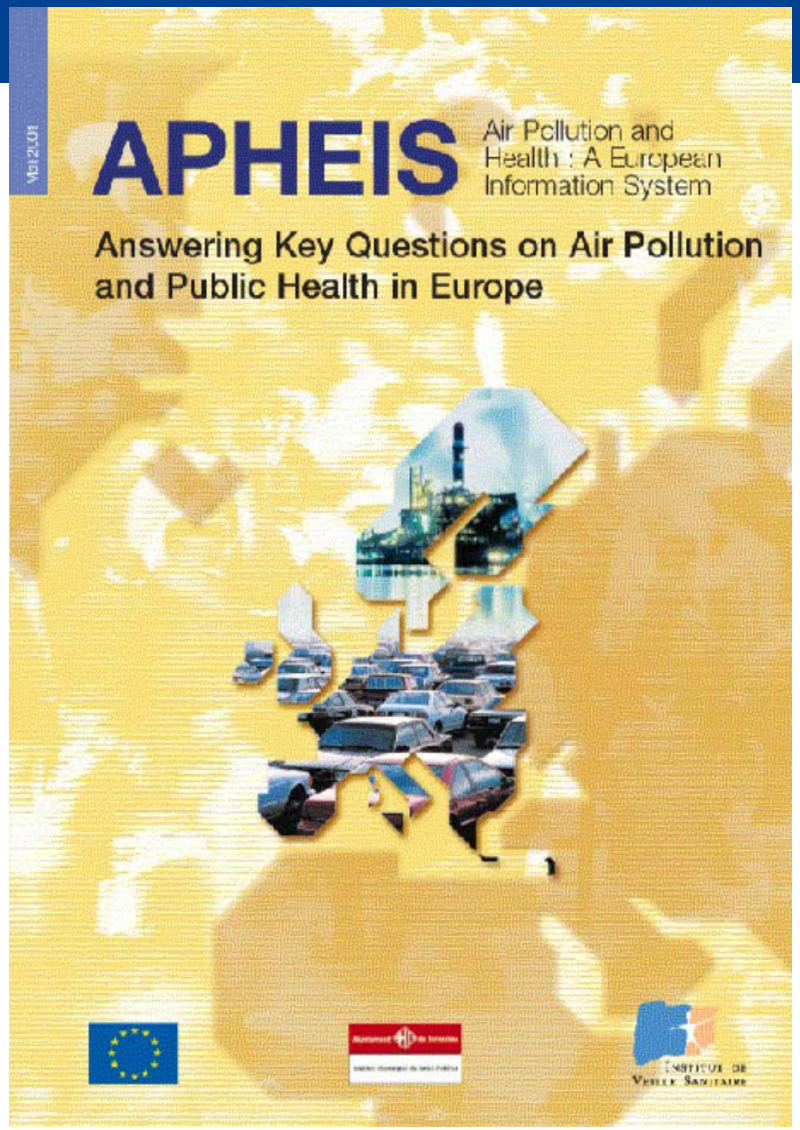
Perform health-impact assessments (HIAs) on short- and long-term effects of AP over time

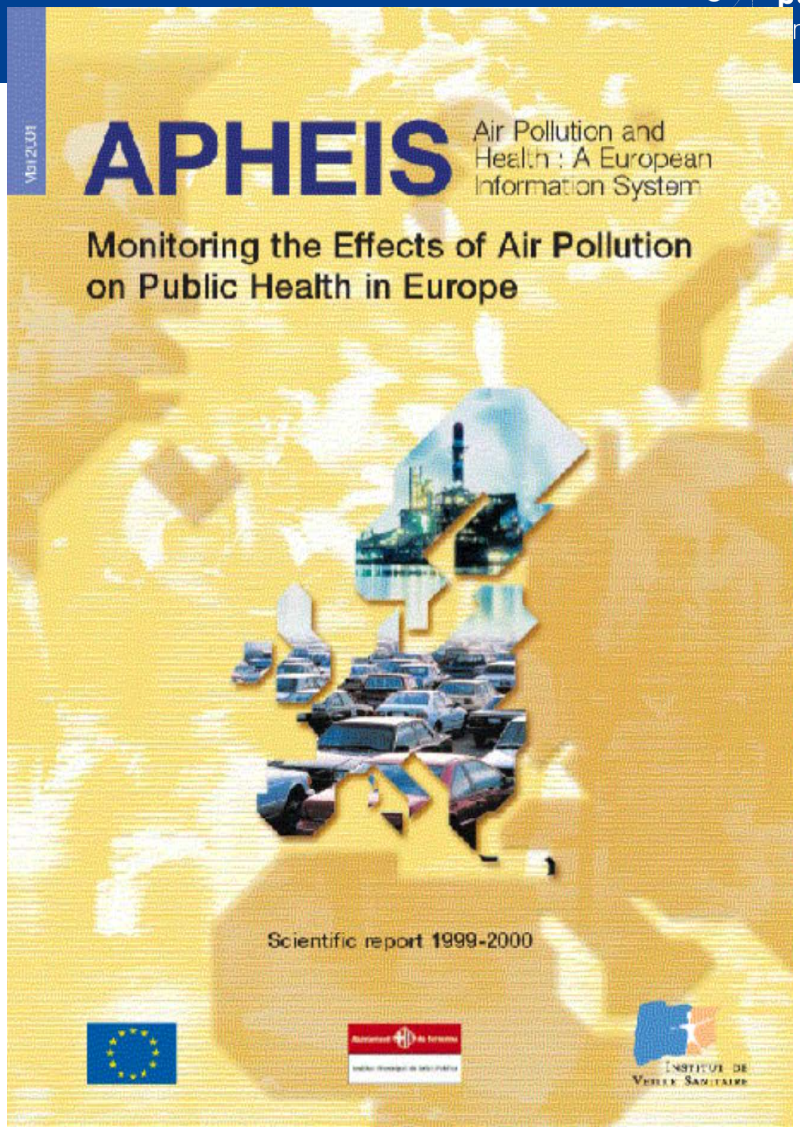
Deliver periodic reports on the impact of AP on PH at the city and European levels simultaneously

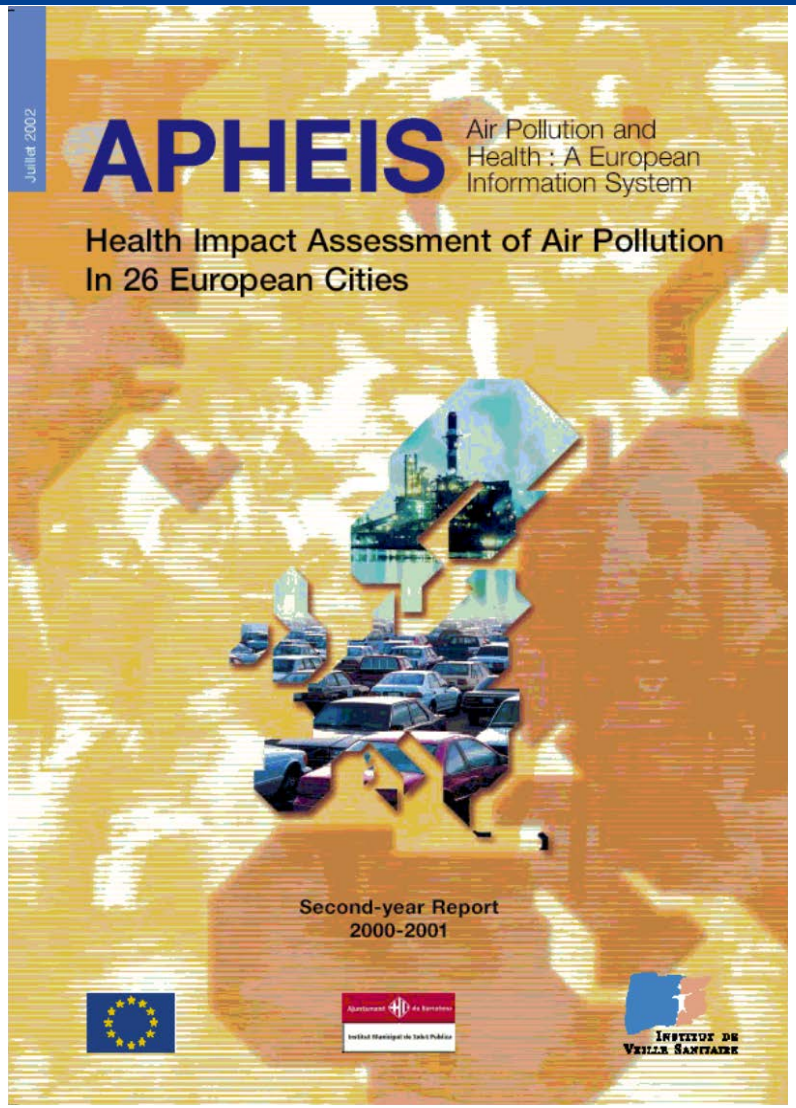
The Apheis Network

The Apheis Network




APHEIS
Air Pollution and Health : A European Information System
Answering Key Questions on Air Pollution and Public Health in Europe


APHEIS
Air Pollution and Health : A European Information System
Monitoring the Effects of Air Pollution on Public Health in Europe
Scientific report 1999-2000



- Our HIA provided a detailed picture of the impact of air pollution on health in 26 European cities, and showed that air pollution continues to threaten public health in Europe
- Even very small and achievable reductions in air pollution levels have an impact on public health
- A sustained lowering of annual mean values of $PM_{2.5}$ to 15 µg/m^3 would produce considerable gains in life expectancy of between 1 month and over 2 years depending on the city

Achievements of Apheis

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- A collaborative, bottom-up network very successful in helping both local and European decision-making

The Apheis surveillance system fostered cross-fertilization between multiple disciplines and regions to:

- create skilled, local teams
- enrich know-how and the quality of its findings
- and explore important HIA methodological issues

Using this approach, Apheis has established a good basis for:

- Comparing methods and findings between cities
- Applying HIA to other EH fields (ENHIS)

Achievements

Apheis (Aphekom) is an active network of environmental and health professionals in Europe:

- Various local and national authorities have identified this network as able over time to provide sound scientific advice on health risks related to air pollution

- Cities not initially involved in the Apheis surveillance system have expressed a desire to join the informal network

Impact of the Apheis project

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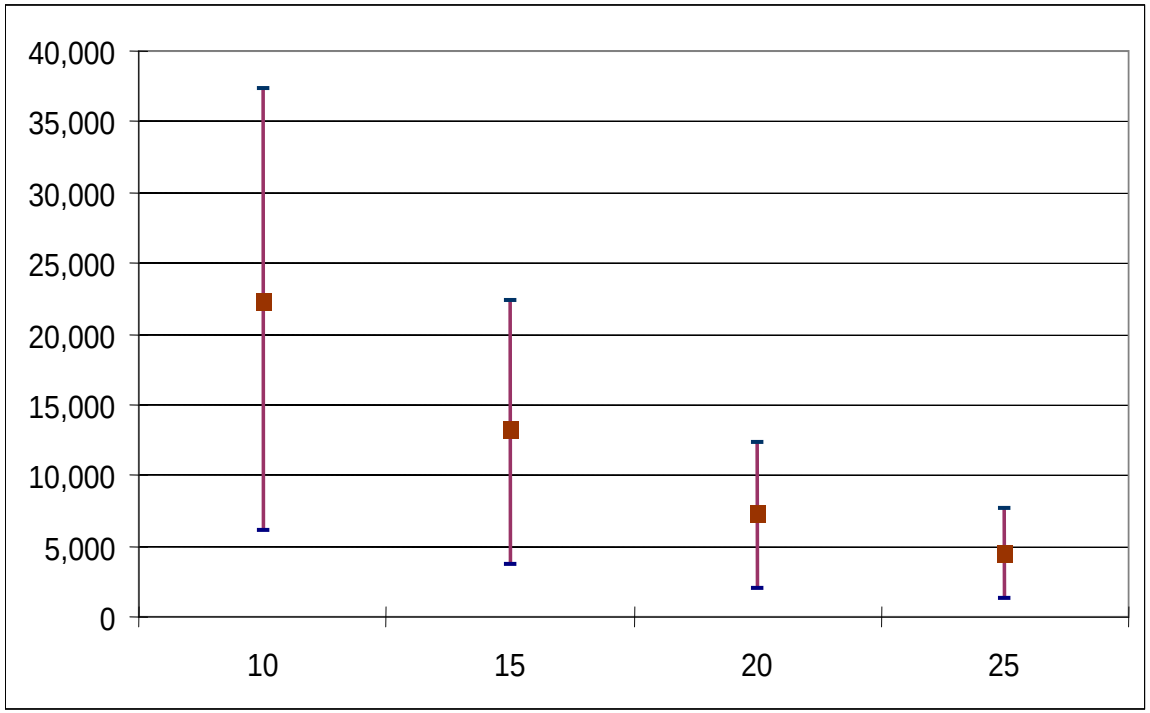
IMPLICATIONS FOR EU POLICY MAKING

Potential postponements in total annual deaths (central estimate and 95% ci) among people age 30 years and over in the 26 Apheis cities for different decreases in annual PM2.5 levels



Impact of the Apheis project

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IMPACT ON THE CENTERS' WORK

- Apheis centres learned the philosophy, methods and tools of the HIA approach: *Apheis "stimulated us to go further with both national and local HIAs" and obtain funding for this purpose (Stockholm and Gothenburg, Sweden; Andalucia, Spain)*

- And Apheis provided an opportunity to apply HIA to other fields (Vienna, Austria, Stockholm and Gothenburg, Sweden)

- Apheis fostered dialog between environment and health professionals locally: *"A significant impact due to the international dimensions of the project" (Bucharest, Romania)*

"Use of international benchmarking was a good starting point for a science-based discussion of the overall and local results" (Hamburg, Germany)

- Participation in Apheis made local findings more credible: *"Involvement in the Apheis project increased the prestige of our team" (Madrid, Spain)*

Impact of the Apheis project

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IMPACT ON POLICY MAKING

- Apheis findings contributed to local, regional and national environmental-health action plans:

"Apheis findings are very helpful in the current discussion on reducing air pollution in big cities" (Ljubljana, Slovenia, Brussels, Belgium, Bucharest, Romania)

"Apheis findings, beside other results on the impact of air pollution on health, led the Spanish government to approve the new Law on Air Quality" (Valencia, Spain)

- Apheis raised awareness through the mass media and NGOs: HIA findings were easier to communicate than other findings (Stockholm and Gothenburg, Sweden)

"HIA provides a very useful tool for informing the public, because Apheis's results were always attractive for journalists, much more than telling them about RRs or ORs." (Athens, Greece)

"The picture with influence of air pollution on life expectancy had a huge impact in the Netherlands. Translating scientific information into pictures was very helpful." (Rotterdam, Netherlands)

"The assessment of the long-term impact of air pollution, especially years of life lost, was extremely useful for us" in terms of communication. (Budapest, Hungary)

Learnings from Apheis

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TO COMPARE METHODS AND FINDINGS BETWEEN CITIES:

- Build a collaborative network from the bottom up to stimulate cooperation and facilitate decision making on the local, national and broader regional levels

- Use standardized protocols and tools for data collection (short and long term) and HIA analysis

- Keep it simple to ensure feasibility and compliance on the long run

- Involve local committees from the outset

- Foster cross-fertilization between multiple disciplines and regions to create skilled, local motivated teams

Remember however that, because public-health findings continue to have limited impact on policy making, we should put more emphasis on how to “sell” public-health findings to government policy makers and influencers

Apheis funding

Co-funded by:

* Pollution-Related Diseases Program of Health and Consumer Protection DG of the European Commission, contract Nos.:
    - SI2.131174 [99CVF2-604]
    - SI2.297300 [2000CVG2-607]
    - SI2.326507 [2001CVG2-602]

* Participating institutions

KNOWLEDGE
ACTION
APHEIS

Aphekom

Improving Knowledge and Communication for Decision Making on Air Pollution and Health in Europe

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- Aphekom local city reports
- Review of literature and guidelines on innovative methods that integrate emerging evidence of air-pollution health effects into HIAs
- Guidelines and tools (including online tool) for performing local HIAs of air pollution in Eu cities
- Guidelines on monetary cost calculations related to the health impacts of air pollution
- Guidelines for conducting intervention studies, for determining health impacts and for calculating monetary costs of health impacts of strategies to reduce air pollution in Europe
- Guidelines for better disseminating scientific findings to policy makers and other stakeholders for decision making, and an interactive online tool for multiparty discussions in decision-making processes
- Published papers
    - HIAs of traffic exposure and sub-clinical impacts of air pollution and related costs
    - Health impacts of air pollution and related costs in 25 European cities
    - Review of literature on intervention studies
    - Health impacts and monetary benefits of a given strategy to reduce air pollution in Europe

➢ www.aphekom.org

Grant Agreement No. 2007105

www.aphekom.org

The French Surveillance Programme on Air Pollution and Health

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- Short-term effects of air pollution
- Long-term effects
- Air pollution peaks
- Health impact assessments
- Intervention studies

19 cities in the French Surveillance Programme on Air Pollution and Health

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- Cities with more than 100,000 inhabitants
- Chosen for different:
  - sources and levels of pollution
  - climate
  - population
  - urbanisation

New spatial HIA in France

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- CONDUCTED OVER 2007-08
- OBJECTIVES:

  - Provide a national estimate of the health burden of air pollution in France using French environmental and health data combined with European data

  - Illustrate regional variations in air pollution and its impacts on health

  - Provide for the first time information on the impacts of air pollution in areas not covered by the air quality regulations

  - Provide scenarios for informing preventive actions

- COMMUNICATION OF FINDINGS: Sat Sept 3 ISEE oral session HIA of air pollution and environmental exposures (O227 by M Pascal) at 14:15-15:45, Studio 2

Thank you!

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Thank you!