PROJECT IN-SITE

Report of a bridging project in the Euregion Rijn-Maas-Noord for indoor environment that focuses on

- The mapping of institutes and responsibilities for indoor environment of the German and Dutch organizations
- Future cooperation between the indoor-environment and –health organizations and construction organizations

Maastricht, 20 maart 2015

Provincie Limburg, Cluster wonen en leefomgeving, the Netherlands (leadpartner)

RWTH Aachen, University Hospital Aachen, Institute for hygiene and environmental medicine

www.euprevent.eu

Contents

1 Summary

50% of the houses has an unhealthy indoor-environment, with negative health consequences such as asthma and COPD. On the other hand a lot of houses are reconstructed or rebuilt - with strict isolation requirements-, without automatically taking into account more ventilation of the house. It is important to avoid more indoor environmental problems.

The goal of the project Insite is testing and strengthening the willingness and ability of future European regional cooperation between indoor health organizations and the construction/building companies and organizations. With this cooperation a more effective and efficient approach for indoor environment can be reached. Including the indoor-environment issues of transnational habitation and energy-efficient homes.
First, information is gathered about the tasks, responsibilities and indoor environmental plans of German and Dutch side. Knowing this, it is easier to formulate common goals and to approach the right stakeholders.
With the symposium, all the different stakeholders met each other, were informed about the tasks and projects of each other and discussed possible cooperation. More information www.euprevent.eu.

As a result of this project, the different stakeholders started in 2015 with formulating an Euregional Interreg V-project for indoor environment.

Het project wordt in het kader van het INTERREG IV A-programma "Deutschland-Nederland 2007-2013" door het Europese Fonds voor Regionale Ontwikkeling (EFRO) en door het kaderproject 3 "Integratie en maatschappij / People to People" van de euregio rijn-maas-noord medegefinancierd. Het project wordt begeleid door het programmamanagement bij de euregio rijn-maas-noord.
Das Projekt wird im Rahmen des INTERREG IV A-Programms "Deutschland-Nederland 2007-2013" aus dem Europäischen Fonds für Regionale Entwicklung (EFRE) und dem Rahmenprojekt 3 "Integration und Gesellschaft / People to People" der euregio rhein-maas-nord mitfinanziert. Es wird vom Programmmanagement der euregio rhein-maas-nord betreut.

INTERREG - Grensregio's bouwen aan Europa
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2 Introduction

2.1 General

The discipline Environment and Health focuses on the possible health risks that are associated with environmental factors. It covers the chemical, biological, radiological and nuclear risk areas in its broadest sense. Next to the scientific pilar, focusing on emerging risks but also on broadening knowledge of existing risks, there is an "executive" pilar that is directly involved with public health issues in practice. The responsibility of this latter pilar is in general embedded on local and (sub)regional governmental level and involves a large quantity of stakeholders and (non)governmental institutes.

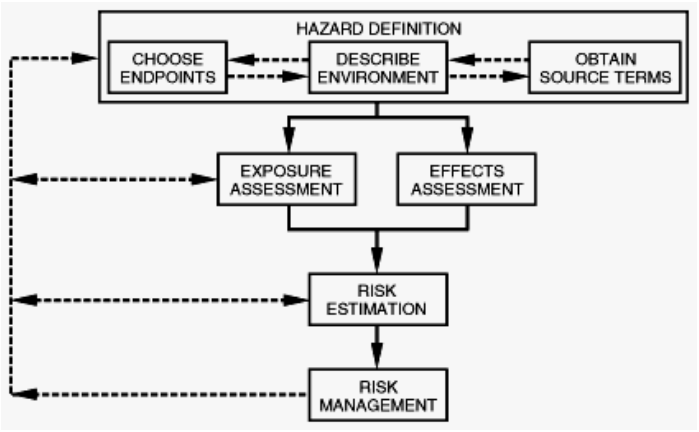

Figure 1: risk assessment paradigm

Main task of these institutes are built around the risk assessment paradigm (figure 1). Hazard based data are coupled to exposure data and a possible risk is assessed based on these data sets. Once assessed, measures can be defined to reduce or minimize risks for targeted populations. Risk managers set and implement risk measures and maintain the new situation by structural policy monitoring trajects.

Communication plays an essential role in this process. In the risk assessment process communication is important in exchanging information and maintaining essential networks and platforms. Once the risk is assessed, the risk management phase is mainly dependent on the communication means that are used. Public perception, political and managerial forces but also cost-benefit

analysis are factors that influence the outcome of Risk Management, next to the actual Risk Assessment data. Communication therefore is a discipline that always should be taken into account from the beginning of projects and trajects in the area of environmental health.

The institutes involved in the "executive" pilar are working in a, mostly, reactive response matter. More than half of the active issues can be appointed to indoor-health related problems. Proactive and preventive activities, installing interdisciplinary networks and cooperations and development of a uniform tool could lower the daily burden of incoming issue-reports within that area.

2.2 EU region Meuse Rhine – cross border needs

Within the area of environment and health, at this moment there is no clear and internationally comparable uniform expertise in the Euregion Meuse Rhine. With regard to institutes that are active in the area of environmental health from a public health point of view, there are large differences in governmental organisation, responsibilities, materials , methods and expertise between the regions in the EU-zone EMR. Because this region is densily populated and because of the high level of cross border activities (work/living/etc) in this region, a uniform and harmonised approach of environmental health issues and problems will support the daily work of the institutes involved in environmental health issues with regard to efficacy and efficiency.
The harmonisation and uniform approach of a transnational advice with regard to health risk assessment of environmental issues/problems will be the target of a conceptual Interreg V projectproposal that will be written sequal to the Insite project in 2015. The main result will contribute to a clear and optimised signaling, approach and advice regarding environmental health themes and will stimulate/allow the transnational cooperation and interoperability between the responsible national organisations.

The presence of managerial-political and contentional support In the Euregion Meuse Rhine is necessary to allow international cooperation and collaboration within the context of environmental health. One of the objectives of the project In-Site (Interreg IV) focuses on this increase of support and awareness.

Furthermore the aspect of indoor environmental health has been integrated in the political agenda of the Province Limburg (Netherlands).

There are several factors that indicate the transnational need for a harmonised approach in health risk assessment.

Health Status EUregion

In the Euregion Meuse Rhine Nord the life-expectancy and morbidity is lower compared to the other Euregions. Subsequently the cost of Health Care in this Euregion are higher (symposium Roermond, presentation Gerard Hagen)

Building and Construction

Between the three neighbouring countries in the EU region Meuse Rhine there is a large variation in applied technical building parameters in case of constructing and/or renovating (new) buildings. The indoor quality of a building is determined by, among others, these applied building techniques and buildingmaterials. Because of this difference in indoorconditions, a difference in health effects and complaints of the users will be expected between the countries.

Transnational habitation

Within the Euregion Meuse Rhine a large number of new building projects are being worked upon but are also newly planned. There is a lot of transnational interest for habitation of these buildings. Next to this, there are also a lot of clusters of analogous buildings/dwellings that are also used/habitated by foreigners from neighbouring countries.

Medical Services

Along the borderline Germany/Netherlands/Belgium, in the Meuse Rhine region, a large transnational “habitation” is present. These habitants generally continue to use the medical services and other governemental (supporting) organisations in their countries of origin. The methods the physicians use to diagnose for example COPD differs between the Netherlands and Germany, resulting in a difference in incidence numbers. One of the problems that may arise due to this fact is that the signaling and advice regarding health risks caused by a worse indoor climate can vary within one district from door to door.

2.3 Goal

To realise a concrete and employable project Interreg V, a pilotproject has been set up in the time-bridging period between the Interreg IV and Interreg V projects. The main goal of this pilot project is the generation of a practical and organisational conspectus of processes, products and chainpartners of the German as well as the Dutch Meuse Rhine organisations (health- as well as environmental institutes) in the area of indoor health advice and support.

This underlying report is the result of a bridging project that focusses on the mapping and documentation of the German and Dutch institutes and departments that have responsibilities with regard to indoor-climate and -health.

3 Information gathering

To gather and map the necessary information with regard to practical and organisational conspectus of processes, products and chainpartners of the German as well as the Dutch Meuse Rhine organisations (health- as well as environmental institutes) in the area of indoor health advice and support, several information sources have been employed;

Deskresearch

Using different existing sources (literature/internet/law) within the first period deskresearch has been performed using the internet as main source.

Questionnaire research

Besed on the information gathered in topic 1 (deskresearch) a questionnaire has been send out. The returned questionnaires have been registrated, analysed and documented.

The German questionnaires are send to the Health Services Viersen, Kleve and Heinsberg. The format for the questionnaire can be found in appendix A.

Interviews

Following the results of topic 2 (questionnaire research), interviews have been conducted with the responsible chain partners and stakeholders within the context of indoor quality policy.

Symposium Indoor Environment

17th of November a symposium is organised with 2 main goals:

- getting to know the stakeholders and differences in the Euregion Meuse Rhine Nord, that are active in the field of Environmental Medicine
- discuss possible cooperation on indoor environment.

4 Results

4.1 Data Gathering

Germany

A desk research has been performed using the internet. Information has been gathered with regard to general political structure and the role of health services in that system. Using the information from the desk research a questionnaire has been setup (appendix A).

In the German region three questionnaires were send to the Health Services in the regions Viersen, Kleve and Heinsberg. After one week the health services were called by phone to take the first interview based on the questionnaires.

During the interviews basic information was gathered with regard to the environmental health organisation in the area of indoor-environment.

The next phase consisted of the setup of a list of stakeholders that are active in the framework of healthy indoor environment.

Table 1 List of stakeholders in German ERMN framework Healthy indoor Environment

Nr.	Institute	Location
1	Institute of Hygiene and Environmental Medicine – Uniklinik Aachen	Aachen
2.	Environmental Medicine - Health services Kleve	Kleve
3.	Environmental Medicine - Health services Viersen	Viersen
4.	Environmental Medicine - Health services Heinsberg	Heinsberg
5.	LANUV	
6.	Bauamt / Schulamt Municipalities Kleve	**Steden** 1. Emmerik (*Emmerich am Rhein*) 2. Geldern (*Gelderen*) 3. Goch 4. Kalkar 5. Kevelaer 6. Kleef (*Kleve*) 7. Rees 8. Straelen **Gemeenten** 1. Bedburg-Hau 2. Issum 3. Kerken 4. Kranenburg 5. Rheurdt 6. Uedem 7. Wachtendonk 8. Weeze

7.	Bauamt / Schulamt Municipalities Viersen	**Steden** 1. Kempen 2. Nettetal 3. Tönisvorst 4. Willich 5. Viersen **Gemeenten** 1. Brüggen 2. Grefrath 3. Niederkrüchten 4. Schwalmtal
8.	Bauamt / Schulamt Municipalities Heinsberg	**Steden** 1. Erkelenz 2. Geilenkirchen 3. Heinsberg 4. Hückelhoven 5. Übach-Palenberg 6. Wassenberg 7. Wegberg **Gemeenten** 1. Gangelt 2. Selfkant 3. Waldfeucht
9.	UBA	Berlin

The last deliverable of this project was the organisation of a healthy indoor symposium were all stakeholders were invited. More information about the symposium can be found in appendix C.

The Netherlands

A desk research has been performed using the internet. Information has been gathered with regard to general political structure and the role of health services in that system.

Next, interviews have been conducted with the responsible chain partners and stakeholders within the context of indoor quality policy. The selection of stakeholders to be interviewed depended upon:

- The different tasks / roles/ projects of organizations for indoor environment
- budgets and possibilities of an organization to cooperate
- (pro) activity to collaborate
- The presence of existing networks between health partners and building partners. That differs in Germany and The Netherlands.

Table 2 List of stakeholders in Dutch ERMN framework Healthy indoor Environment

Nr.	Institute	Location
1.	GGD Noord- en Midden Limburg Health Services	Roermond
2.	Transregional centre EM	Province Brabant and Limburg
3.	GGD Zuid-Limburg Health Services	Geleen
4.	NEBER, Zuyd University (Nieuwe Energie, Built Environment and Renewables)	Heerlen
5.	RIVM National Institute for Public Health and Environment	Bilthoven
7.	IBA Parkstad Cooperation between various disciplines in a region	Heerlen
8.	Woningcoorporatie (social housing) Example project Kerkrade	Kerkrade
9.	BAM Duurzaam Bouwen Building company	NL, nevenlocatie Heerlen

4.2 Geography and managerial-political organisation

The Euregion Rhine Meuse North is the euregion in the Dutch-German borderline area situated at the northern Niederrhein and the Meuse. This Eurregion was founded in 1978 en has been transferred to a public lawful organisation. In the North this area is bordered by the Euregion Rhine Waal. In the south it is bordered by the area Aachen-Maastricht-Liege-Hasselt.

The largest cities in this region are Mönchengladbach (about 266.000 habitants), Krefeld (242.000 habitants), Neuss (152.000 habitants) , Venlo (100.000 habitants, Viersen (76.000 habitants) and Roermond (55.000 habitants).

The EMRN region consist of the area as visualised in figure 2.

Figure 2: ERMN region

Some parameters with regard to the EU region Meuse Rhine - EMR

- About 1,8 million habitants live in this area
- Characterized with a large industrial area and a large traffic density
- One of the worst areas with regard to European air quality levels
- Health status & life expectancy are low compared to other EU regions
- A continuous and high load for the environmental and health services

4.2.1 North Rhine-Westphalia (Germany)

North Rhine-Westphalia is the most populous state of Germany. North Rhine-Westphalia was formed in 1946 as a merger of the northern Rhineland and Westphalia, both formerly parts of Prussia. Its capital is Düsseldorf; the biggest city is Cologne. Four of Germany's ten biggest cities—Cologne, Düsseldorf, Dortmund, and Essen—are located in North Rhine-Westphalia.

Population: 17.84 million

Area: 34,084 km²

Administrative divisions of Germany

In figure 3 the administrative divisions in Germany are visualised.

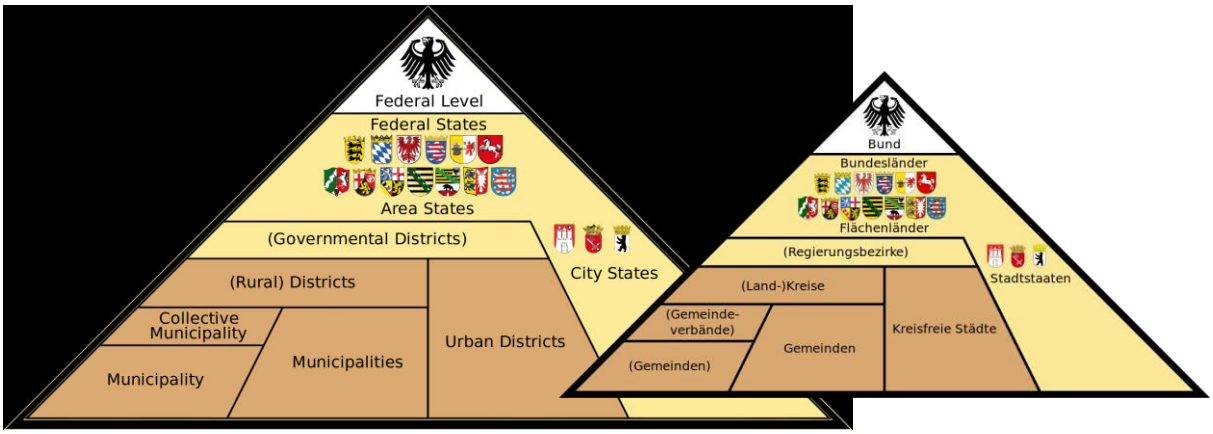

Figure 3: Administrative divisions (wikipedia)

Germany is made up of sixteen states, known as **Bundesländer** (singular Bundesland) or Länder (singular Land). Since Germany has a federal constitution, the constituent states retain a measure of sovereignty. With an emphasis on geographical conditions, Berlin and Hamburg are frequently called Stadtstaaten (city-states), as is the Free Hanseatic City of Bremen, which in fact includes the cities of Bremen and Bremerhaven. The remaining 13 states are called Flächenländer (literally: area states).

The Districts of Germany (**Kreise**) are administrative districts, and every state except the city-states of Berlin, Hamburg, and Bremen consists of "rural districts" (Landkreise), District-free Towns/Cities (Kreisfreie Städte, in Baden-Württemberg also called "urban districts", or Stadtkreise), cities that are districts in their own right, or local associations of a special kind (Kommunalverbände besonderer Art).

As of 2011, there are 295 Landkreise and 107 Kreisfreie Städte, making 402 districts altogether. The Landkreise have primary administrative functions in specific areas, such as highways, hospitals, and public utilities.

Municipalities (**Gemeinden**): Every rural district is subdivided into municipalities, while every urban district is a municipality in its own right. There are (as of 6 March 2009) 12,141 municipalities, which are the smallest administrative units in

Germany. Cities and towns are municipalities as well, also having city rights or town rights (Stadtrechte).

The municipalities have two major policy responsibilities. First, they administer programs authorized by the federal or state government. Such programs typically relate to youth, schools, public health, and social assistance. Second, Article 28(2) of the Basic Law guarantees the municipalities "the right to regulate on their own responsibility all the affairs of the local community within the limits set by law." Under this broad statement of competence, local governments can justify a wide range of activities. For instance, many municipalities develop and expand the economic infrastructure of their communities through the development of industrial trading estates.

Overview per district of municipalities

Düsseldorf and Köln are two of the five Regierungsbezirke of North Rhine-Westphalia, Germany, in the northwest of the country that cover the EMRN region. Dusseldorf covers the western part of the Ruhr Area. It is the most populated of all German administrative areas of the kind. In the governmental district of Dusseldorf 5 districts and 10 cities. In figure 4 these are shown.

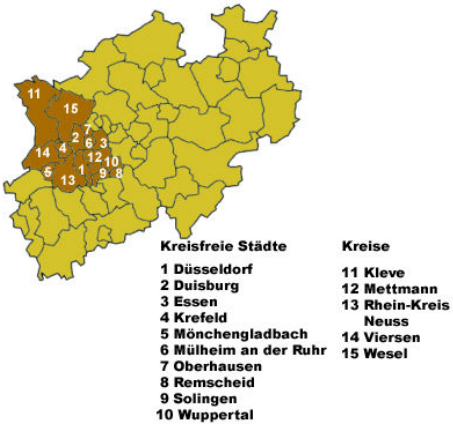

Figure 4 Governmental district Dusseldorf

Köln (Cologne) is located in the south-west of that state and covers the hills of the Eifel as well as the Bergisches Land.

Figure 5 Governmental district Köln

4.2.2 Limburg (The Netherlands)

Limburg is named after the Castle Limbourg. The first King, Willem I, changed the name of the area in Limburg. After separation of Belgium in 1839, Limburg was divided in between both countries.

The capital of the Province of Limburg is Maastricht.

Population: 1.120.006 million

Area: 2209 km2

Administrative divisions of The Netherlands

Figure 6: administrative divisions of the Netherlands

The Netherlands (national- landelijk) is made up of twelve Provinces (provincial). One of them is the Province of Limburg. In the next figure, the 15 municipalities (gemeenten) of Limburg-Noord are shown.

Figure 7: municipalities Limburg North and Middle

4.3 Organisation Environmental Health

4.3.1 North Rhine-Westphalia (Germany)

Stakeholders

In this paragraph in table 3 an overview will be given of the different institutes that are involved in environmental health issues in the North Rhine-Westphalia area.

Table 3 – Overview different institutes Germany & NRW

Environmental Institutions on country level	
UBA	Umweltbundesamt, + Institut für Wasser-, Boden- und Lufthygiene (formerly: German health authority
RKI	Robert Koch Institut
BgVV	Bundesinstitut für gesundheitlichen Verbraucherschutz und Veterinär medizin
BfR	Bundesinstitut für Risikobewertung
BVL	Bundesinstitut für Verbraucherschutz und Lebensmittelsicherheit

Environmental Institutions in NRW	
Universities with environmental health expertise	IHU-Aachen IUF-Düsseldorf IUTA-Duisburg/Essen Dept. Hygiene, Social and environm. Medicine-Bochum Faculty of health sciences-Bielefeld
Environmental intitutions with outpatient clinic in NRW	IHU-Aachen
Scientific and private institutes	Helmholtz Institute Max Planck Institute Fraunhofer Institute
Environmental Health Institutions in NRW	
environmental medicine – health service district	Kreis Kleve Kreis Viersen Kreis Heinsberg
Institute of Hygiene and Environmental Medicine	IHU-Uniklinik Aachen
AURA Arbeitskreis Umweltmedizin in der Region Aachen	working commitee for environmental medicine in the region round Aachen

Organisational overview related to the Health services

In the following figure the organisational stakeholders for the district Health Service are visualised on the different administrative levels.

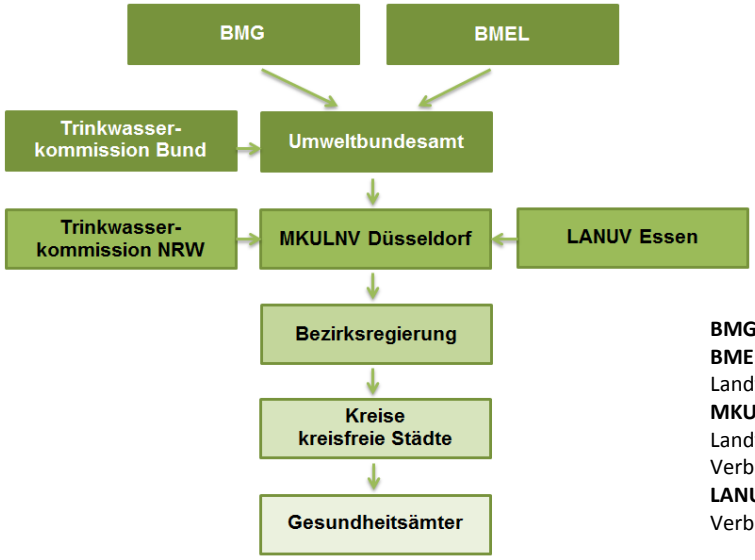

Figure 8: administrative levels

As can be seen, the health services are part of the districts governmental organisation. They focus on the total district area with regard to environmental health, and work together with all the municipalities and their respective departments (building, schools etc).
On MKUNLV level environment and health according to the respective regulatory frameworks are integrated and translated to the "lower" administrative levels (district and health services).

Responsibilities Health services - Districts

The responsibilities of the health services can be formulated and summarised in two main concepts;

1. consult with regard to environmental-health issues
2. consult with regard to individual health issues that can be related to environmental issues.

Ad 1. In the ERMN area for example building construction plans, area development, cross border health influences (f.e. fracking in NL, groundwater retrieval in borderline area), effects of DSM

Ad 2. In the ERMN area standard reference to "umweltmedizinische Ambulanz und Umweltmedizin der RWTH Aachen" for medical and environmental

examination and triage. Next tot hat reference specific indoor air examinations or sampling can be performed by other specialised institutes.

Responsibilities AURA and IHU-Aachen

AURA (Arbeitskreis Umweltmedizin in der Region Aachen) is a platform for the environmental health departments of the health services in NRW. The directors of the health services and the environmental health professionals working in the respective health services gather about 6 times per year to discuss actual environmental health issues and focus on harmonisation and optimisation of their mitigating actions.

Aura was founded in 1999 to coordinate the activities of the local health authorities, the university and the general partitioners, and it specific aim is education of general partitioners in environmental questions. In 2013 it was re-founded with the emphasis on cooperation between the local health authorities in the administrative region Cologne and district Neuss and the institute of hygiene and environmental health.

IHU (Institute of hygiene and environmental medicine of the Uniklinik Aachen) exists for decades and has built a profound expertise in the area of environmental hygiene and medicine. Its activities can be roughly divided in three areas;

1. Scientific research (participation and coordination in scientific (inter)national projects;
2. Practical research and consult in actual environmental issues;
3. Environmental medical examination (outpatient clinic).

The areas of expertise of the IHU Aachen listed:

- Epidemiology - studies exposition and disease
- Analytical chemistry - environmental monitoring
- Microbiology/mycology - effects of bioaerosols
- (Eco)Toxicology genotoxicity of chemical products and environmental samples
- Research centre for electromagnetic environmental safety
- Outpatient clinic for patients with environmental complaints

Indoor health issues: where to go in NRW

Habitants in the NRW area have several options to go to, in case of environmental health complaints. The following figure shows the options.

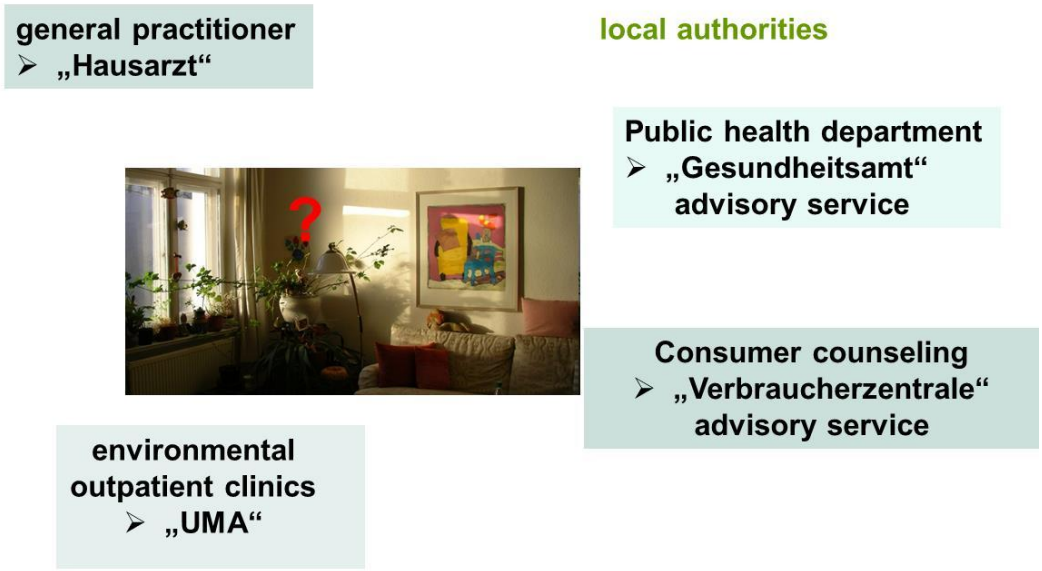

Figure 9: where to go

In general people will go to the general practitioner who will reference them to UMA or the health services. The health services will directly reference to UMA since most expertise and equipment needed for examination is located at UMA.

Since the Interdisciplinary environmental medical center at University Hospital Aachen plays a central role in medical triage (the second responsibility of environmental health in the health service-system) ánd environmental triage that role is visualised in the next figure.

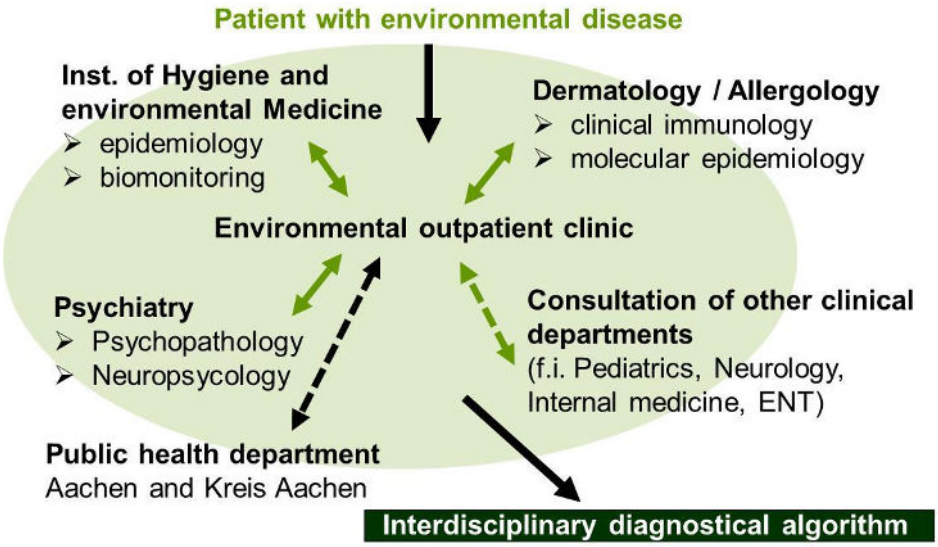

Figure 10: MA - Interdisciplinary environmental medical center at University Hospital Aachen (UKA)

Since UMA is part of the Uniklinik Aachen, all Medical Specialisms are integrated to get a interdisciplinary diagnostical algorithm, which is in turn translated to a medical ánd environmental health triage and consult.

Responsibilities Indoor & Health – public/private buildings

There is a distinct difference in responsibility in case of indoor environmental health issues in public or private buildings.

In the following table the responsibilities are listed.

Table 4: responsibilities public buildings

Responsibilities in public buildings	
Responsible person	**Responsible for**
Owner or legal referenced owner. Buildings owned by communities: buildingowner	Immision assessment, Cause related research, Remediation, for example regulatory observance (a.o. buildingtechnical laws as PCB-, PCP-, Asbestos guideline), responsible for the absence of health damaging exposures (i. S. §§ 3, 16, 56 and 87 der Bauordnung NRW).
School management Office management Operators	Reporting technical problems to responsible persons for buildings; Protection measures for users of buildings, like f.e. ventilation, cleaning, changes in use, when necessary involvement of occupational safety.

Responsibilities in public buildings	
Responsible person	**Responsible for**
Health services	Health assessment of location and/or monitoring values. Possible ranking of measures according to § 10 ÖGDG NRW (appendix); Can be included/activated by public owners and management of public buidlings.
Landesamt für Natur, Umwelt und Verbraucherschutz NRW (LANUV NRW)	Contentional environmental-health support for health services (inquiry by health services)

For private buildings a difference has to be taken into account for owned buildings, rented buildings and offices. For owned buildings the owner is responsible. In the following table the responsibilities are listed.

Table 5: responsibilities for private buildings

Responsible person	Responsible for
Owner or legal referenced owner. Buildings owned by communities: buildingowner	Immision assessment, Cause related research, Remediation, for example regulatory observance (a.o. buildingtechnical laws as PCB-, PCP-, Asbestos guideline), responsible for the absence of health damaging exposures (i. S. §§ 3, 16, 56 and 87 der Bauordnung NRW).
Tenants	Reporting technical problems to responsible persons for buildings; Protection measures for users of buildings, like f.e. ventilation, cleaning, changes in use, when necessary involvement of occupational safety.
Health services	Oral environmental-health consult possible.
Landesamt für Natur, Umwelt und Verbraucherschutz NRW (LANUV NRW)	Contentional environmental-health support for health services (inquiry by health services)

4.3.2 Limburg (The Netherlands)

Stakeholders

In this paragraph in table 6 an overview will be given of the different institutes that are involved in environmental health issues in the Limburg area.

Table 6– Overview different institutes The Netherlands and Limburg

Environmental Institutions on country level	
RIVM	National Institute for Public Health and Environment
Transregional centre environment and health	Centrum Gezondheid en Milieu, division Province of Brabant and Limburg
TNO	Nederlandse Organisatie voor toegepast natuurwetenschappelijk onderzoek (Knowledge with practical applications)
Environmental Institutions in Limburg	
Universities with environmental health expertise	University Maastricht
Environmental Health Institutions in Limburg	
GGD Zuid Limburg Health Service	Limburg Zuid (South)
GGD Veiligheidsregio Noord Health Service	Limburg Midden en Noord (Middle and North)

Organisational overview and responsibilities related to the Health services

In the following figure the organisational stakeholders for the district Health Service are visualised on the different administrative levels.

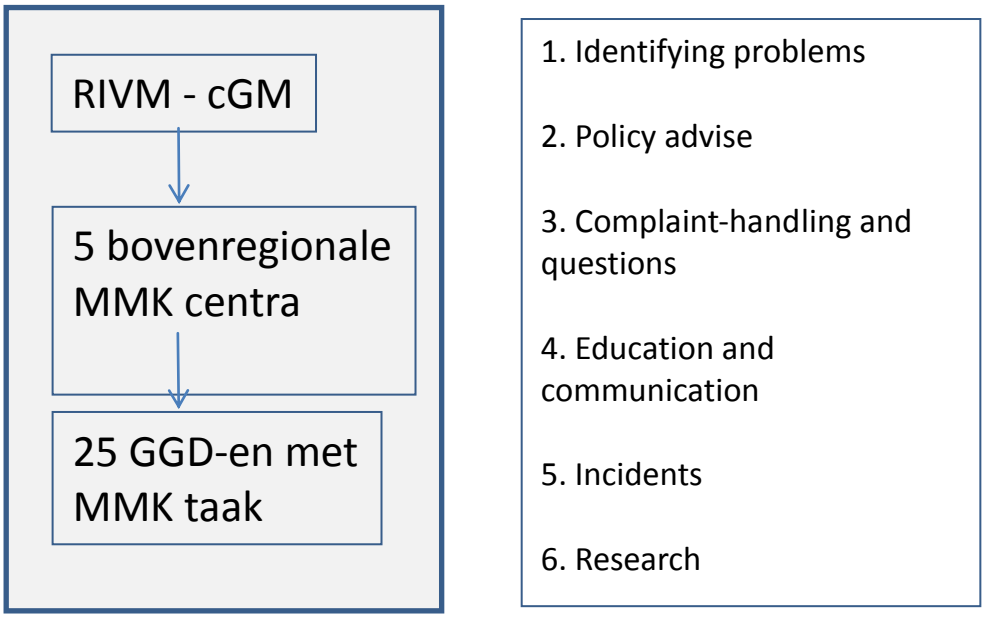

Figure 11: stakeholders and responsabilities

As can be seen in Figure 11, the health service on national level (RIVM, cMG) is backoffice for the Health Services. The health service focuses on the total district area with regard to environmental health, and works together with all the municipalities.

Legislation and responsibilities The Netherlands
and connection building industry & health discipline

Legislation *(partly written in Dutch)*

Wet publieke gezondheid (Wpg)
Monitoring, beschermen en bevorderen gezondheid burgers.
Wettelijk ondergebracht bij Gemeenten – afd Welzijn & Gezondheid
Uitbesteden aan GGD (één veiligheidregio))

Bouwbesluit
Connection with private / public buildings and the health discipline

Tabakswet en Warenwet

Policy

To improve the indoor environment in buildings, schools en daycares, the National government put extra effort in a National plan for environment and Health. Through this policy, the construction industry and health discipline are linked to each other.

Indoor health issues: where to go in Limburg

In the Netherlands people have two options to go to, in case of environmental health complaints: the general practitioner (huisarts) and the public health department (GGD). The following figure 12 shows the options.

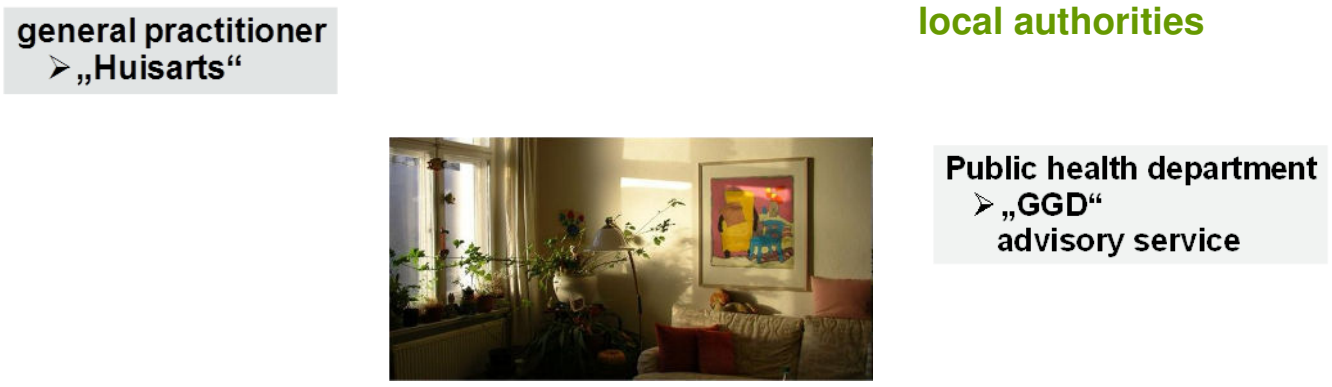

Figure 12: Where to go

In most cases habitants report issues directly to the health services. The health services involve external experts (RIVM-centre of Health and Environment, Province of Limburg) to support the GGD in the environmental diagnose. There is no medical triage system in the standardised procedures.

4.4 Symposium November 17th 2014 Indoor Environment

The inventory of taks/responsibilites and stakeholders resulted on November 17, 2014 in a well-attended symposium. Also partners from other European regional partners and RIVM (NL) participated.

The Symposium on 17th of November focused on the organisations and stakeholders that are working on indoor environment and health aspects. It brought together health experts, technical experts and policy makers of the three countries in our region, both on the health discipline and the building industry disciplines.
This event provided quality discussions, presentations, networking activities and serves as an opportunity for benchmarking and transnational sharing of best practices.

The main objectives of this symposium are:

- Present and discuss respective organisations with regard to indoor air quality, state of the art and gaps in information and expertise required. Getting to know the stakeholders and differences in the Euregion Meuse Rhine Nord, that are active in the field of Environmental Medicine
- Serve as a catalyst for new or advanced research directions, methods and approaches
- Discuss the need for developing sustained information exchange networks
- Facilitate communication among stakeholders
- discuss possible cooperation on indoor environment.

Summary of discussions Symposium:

- the willingness of future European regional cooperation between indoor health organizations and the construction/building companies and organizations. After this Symposium, a next meeting was organized in December 2014.

- Discussions about the bottlenecks:
    - Lack of budget and formation
    - Reorganizations, spending cuts and shortage of manpower
- Discussions about the differences between the participants:
    - Differences in tasks and responsibilities.
    - Differences in focus and target groups on indoor environment.
- Discussions about the focus subjects on indoor environment:
    - Communication and education for target groups private housing, schools and daycares.
    - integration of the disciplines "health" and "construction" for indoor environment. Focus on health and ventilation.
    - Transnational problems
- Do we have the right stakeholders on this symposium or do we need to contact other stakeholder who can be involved in the cooperation?
- How to deal with the participants from other Euregions than ERMN with necessary knowledge and experience for indoor environment and overlapping tasks, target groups?

5 Discussion

With this project we have mapped the organisation that is responsible for environmental-health issues in indoor environment in the Euregion Meuse Rhine Nord. In this we have focused on chainpartners and processes specifically. As can be seen there are some differences in chainpartners between the countries. The main differences are listed as follows:

- Reporting (complaint-handling on indoor environment)
    - In Germany people can report issues with regard to indoor-health to physicians, health services, UKAachen (UMA) and Verbraucherschutzentrale. In general a rough intake and filter is placed and when needed the follow up is performed by Interdisciplinary environmental medical center at University Hospital Aachen (UMA). At this institute a medical as well as an environmental diagnose is triaged. An individual advise is given to the patient/reporter and also communicated with the first line (physicians, health serviced or Verbraucherschutzentrale).
    - In the Netherlands people report issues directly to the health services. The health services involve external experts (RIVM-centre of Health and Environment, Province of Limburg) to support the GGD in the environmental diagnose. There is no medical triage system in the standardised procedures.
- Stakeholders
    - Since the administrative divisions may have their own authority, in Germany the responsibilities of the first line of experise within the area of environment and health is located at UMA and the health services. The involved stakeholders (building and school offices) are divided across different levels (district, municipality, municipal-regions).
    - In the Netherlands the responsibilities of the first line is located at the health services, which in turn are supported by the National Health Institute (RIVM). This is equal across the country for all health services.

- Integrating disciplines “construction/building” & “indoor environment”

The developments within the area of integrating various disciplines in environmental-health issues, differ between the two countries. In the Netherlands indoor environment is integrated in the law for building houses. But doesn’t result in healthy buildings yet. The area of building & construction is increasing their expertise within the environmental-health framework, and is working on integrating their expertise with the expertise of the health services. At this moment projects are arising that focus on that integration. In Germany the integration between the disciplines hasn’t start in this way, yet.

During this project some bottlenecks have been detected. These might be important parameters to involve in future plans and projects within the environmental-health area. These bottlenecks are:

- Lack of budget and formation, especially in Germany the health services are loaded with work and can hardly handle the daily routine business. Additional, non-daily work (like f.e. EU projects) are difficult to implement in the routing work.

  In the Netherlands the integration of projects in the primary processes of the health services could only take place when private commissioning was available.
- Reorganizations, spending cuts and shortage of manpower for indoor environment in the various organizations have negative effects on collaboration, like delay and conservative goals in collaboration.

  Also political elections, an thereby change of political targets, can lead to weakened (or maybe strengthed) goals for the future sustainable partnerships and project application indoor environment.
- The focus on indoor environment is different in the regions. That completes each others knowledge and method of working to reach a more efficient and effective way of working. A possible bottleneck : the different target groups in the different regions.

6 Appendix A : Questionnaire Germany

Institute of Hygiene and Environmental Medicine
RWTH/Uniklinikum Aachen

Questionnaire Indoor Air Quality and Health Risks

This questionnaire will focus specifically on indoor air quality in schools and housings/dwellings. We would like to ask you to answer the questions below from these two specific points of view specifically.

Complaints

1. What type of environmental complaints are being reported? (f.e. funghi, mould, humidity, noise, etc)
    a. At what institute/office/specialist are these complaints reported?
2. What type of health complaints are being reported? (f.e. allergy, aspecific complaints etc)
    a. At what institute/office/specialist are these complaints reported?

Handling

3. What is the procedure for handling these complaints at your institute (and at the other responsible institutes/offices/specialists)?
4. Who is responsible for the medical anamneses/handling (diagnoses/advice/etc)?
5. Who is responsible for the environmental anamneses/handling (monitoring/analysis/advice/etc)?

Support/help/advice

6. What type of support/help is offered to the persons/schools that complain?
    a. Who is responsible for this support/help (f.e. in case of technical adaptations or health improving actions)?

Proactive actions

7. The upper questions focus on reactive handling of complaints. What are proactive activities in this area that are actual (f.e. healthy building projects, schoolsurveys to improve situations, etc)?
8. Which stakeholders do what?

General

9. Can you give a short overview of all stakeholders that have responsible tasks in the area of indoor quality and health (local/provincial/national level – Stadt/Kreis/Land/Bund)?

7 Appendix B: Legislation and responsibilities Germany

Rechtsgrundlage für umweltmedizinische Aufgaben der Gesundheitsämter in NRW:

1. Gesetz über den öffentlichen Gesundheitsdienst des Landes NRW (ÖGDG NRW) vom 25.November 1997 (GV.NW. S. 430, SGV, NRW. 2120) zuletzt geändert durch Art. 2 ÄndG vom 30.04.2013 (GV.NRW. S. 202)
2. Gesetz zur Verhütung und Bekämpfung von Infektionskrankheiten beim Menschen (Infektionsschutzgesetz – IfSG) vom 20. Juli 2000 (BGBe I S. 1045), zuletzt geändert durch Art. 2 Abs. 36 und Art. 4 Abs. 21 des Gesetzes vom 7. August 2013 (BGBl I S. 3154)
3. Verordnung über die Qualität von Wasser für den menschlichen Gebrauch (Trinkwasserverordnung – TrinkwV 2001) in der Fassung der Bekanntmachung vom 2. August 2013 (BGBl I S. 2977)

Weitere Umweltgesetze und Verordnungen

z. B.

- Immissionsschutzgesetz
- Immissionsschutzverordnungen
- Technische Anleitungen (z. B. TA Lärm)
- Verwaltungsvorschriften

§ 10 ÖGDG Umweltmedizin

(1) Die untere Gesundheitsbehörde fördert den Schutz der Bevölkerung vor gesundheitsgefährdenden und gesundheitsschädigenden Einflüssen aus der Umwelt. Sie klärt insbesondere die Bevölkerung hierüber und über sonstige umweltmedizinische Fragen auf. Sie bewertet die Auswirkungen von Umwelteinflüssen auf die Bevölkerung unter gesundheitlichen Gesichtspunkten.

(2) Die untere Gesundheitsbehörde kann zur Abwehr von gesundheitlichen Schäden oder Langzeitwirkungen in öffentlichen Gebäuden entsprechende Maßnahmen anordnen.

(3) Auf dem Gebiet der Umweltmedizin und des Trinkwassers hat das Landesamt für Natur, Umwelt und Verbraucherschutz die Aufgabe, als fachliche Leitstelle für den öffentlichen Gesundheitsdienst die Landesregierung und die unteren Gesundheitsbehörden zu beraten und zu unterstützen.

§ 37 IfSG Beschaffenheit von Wasser für den menschlichen Gebrauch sowie von Schwimm- und Badebeckenwasser, Überwachung

(1) Wasser für den menschlichen Gebrauch muss so beschaffen sein, dass durch seinen Genuss oder Gebrauch eine Schädigung der menschlichen Gesundheit, insbesondere durch Krankheitserreger, nicht zu besorgen ist.
(2) Schwimm- oder Badebeckenwasser in Gewerbebetrieben, öffentlichen Bädern sowie in sonstigen nicht ausschließlich privat genutzten Einrichtungen muss so beschaffen sein, dass durch seinen Gebrauch eine Schädigung der menschlichen Gesundheit, insbesondere durch Krankheitserreger, nicht zu besorgen ist.
(3) Wassergewinnungs- und Wasserversorgungsanlagen und Schwimm- oder Badebecken einschließlich ihrer Wasseraufbereitungsanlagen unterliegen hinsichtlich der in den Absätzen 1 und 2 genannten Anforderungen der Überwachung durch das Gesundheitsamt. Für die Durchführung der Überwachung gilt § 16 Abs. 2 entsprechend. Das Grundrecht der Unverletzlichkeit der Wohnung (Artikel 13 Abs. 1 Grundgesetz) wird insoweit eingeschränkt.

8 Appendix C: Symposium 17 november 2014

On the website www.euprevent.eu the following information of the Symposium can be found:

- Presentations (networks, projects and organization of indoor environment in the different regions and organizations)
- Brochure (background, programme and organizing partners)
- Photo's

Programme

09.30 **Walk in**

10.00 **Welcome**

Deputé P. H. van Dijk | Province of Limburg, the Netherlands

10.10 **Dr. Rik Rogers**

National Institute for Public Health and Environment, RIVM, the Netherlands, Centre for Sustainability, Environment and Health

Organization and networks of indoor environment in the Netherlands

10.30 **Presentations matchmaking**

10.50 **Prof. Wolfgang Dott**

Hygiene and Environmental Health, RWTH Aachen, Germany

Organization and networks of indoor environment in Nordrhein Westfalen

11.05 **Presentations matchmaking**

11.15 **Coffee Break**

11.30 **Drs. Monique Meijerink**

Public Health Service Limburg-North, The Netherlands

Actual projects, best practices, problems and interventions for indoor environment in Middle& North of Limburg, The Netherlands

11.50 **Dr. Karl-Heinz Feldhoff**

Gesundheitsamtes des Kreises Heinsberg, Germany | Chairman euPrevent (euregional) | Chairman Aura, Hygiene and Environmental Health, RWTH Aachen, Germany

Actual projects, best practices, problems and interventions for indoor environment in Nordrhein Westfalen, Germany

12.10 **MSc. Wendy Broers**

Zuyd University, The Netherlands

Best practices sustainable buildings and indoor environment

12.30 **Lunch**

13.30 **Ir. Gerard Hagen**

Province of Limburg, Program coordinator Centre for Sustainable Environment

Upcoming Euregional project indoor environment (Interreg V)

13.50 **Workshop**

Explore possibilities of transnational harmonization and/or best practices

15.00 **Concluding Remarks**