



## Editorial

### Improving public health responses to extreme weather/heat-waves - the EuroHEAT project

In June 2004, at the Fourth Ministerial Conference on Environment and Health, European ministers of health and the environment noticed that “the climate is already changing and that the intensity and frequency of extreme weather events, such as floods, heat-waves and cold spells, may change in the future. Recent extreme weather events caused serious health and social problems in Europe, particularly in urban areas.” [1]. They decided to take action to reduce the current burden of disease due to extreme weather and climate events based on the working paper “Public health responses to extreme weather and climate events” [2]. As a result, EuroHEAT was launched, a project coordinated by the WHO Regional Office for Europe and co-funded by the European Commission (EU) [3]. The general aim of the project was to improve public health responses to weather extremes by identifying, mitigating, preventing and adapting to the health impacts of heat-waves, in particular.

**Heat threatens health** - Periods of high temperatures - heat-waves - are projected to increase in number, intensity and duration over most land areas in the 21<sup>st</sup> century [4]. However, there is no standard definition for heat-waves. EuroHEAT defined a heat-wave as “a period where the maximum apparent and the minimum temperature are over the 90<sup>th</sup> percentile of the monthly distribution for at least two days.” Within the EuroHEAT project, nine European cities (Athens, Barcelona, Budapest, London, Milan, Munich, Paris, Rome and Valencia) were analysed and an increase in mortality from 7.6 % to 33.6 % during heat-wave episodes was estimated. The impact of longer heat-waves (more than four days) on mortality was 1.5 - 5 times higher than that of shorter heat-

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waves. Moreover, there is growing evidence that the combined effect of heat-waves and high levels of ozone or fine particulate matter (PM<sub>10</sub>) increases mortality. Elderly persons (74-84 years) are particularly affected hereof. However, reduction in PM<sub>10</sub> and ozone exposure seems to reduce the risk of death [5]. Besides the elderly, chronically ill persons (suffering of diabetes, some neurological disorders, cardiovascular diseases or diseases of the renal system e.g. [6]) and women living in European cities suffer the greatest effects of heat-waves. Under the predicted carbon dioxide (CO<sub>2</sub>) emission scenario in 2030, more than 400 deaths per year due to hot temperatures are expected for example in Athens, Paris, Rome and Budapest, respectively [7, 8].

**Heat-health action plans help to prevent the adverse health effects of heat-waves** - EuroHEAT recommends the development and implementation of heat-health action plans at national and regional level in Europe, to prevent, react to and contain heat-related risks to health. The following elements of heat-health action plans are recommended:

- Bodies and institutions should collaborate and coordinate responses at a national/regional level. Synergies with the International Health Regulations (2005) and existing national disaster plans are advised.
- Accurate and timely alert systems should be developed and established. As part of EuroHEAT, the German Weather Service has developed an online tool providing medium-term forecasting of heat [9].
- As heat-waves are likely to occur every summer, heat-related health information should be developed in advance and advice people on how to protect oneself and how to reduce heat exposure indoors and outdoors.
- Heat exposure should be avoided or reduced by adaptation of individual and community behaviour.
- Short-, medium- and long-term measures in buildings to reduce indoor temperature and long-term improved urban planning e.g. must be introduced.
- Public health interventions need to identify and target particularly vulnerable population groups and individuals.
- Provision of health care, social services and infrastructure.
- Real-time health surveillance (emergency calls, all-cause mortality e.g.) should be incorporated into the planning process.

**Conclusions** - Governments are urged to implement national and regional heat-health action plans as the adverse health effects of heat-waves are largely preventable. However, there are still many knowledge gaps and the specific components of heat-health action plans need to be further investigated, developed and evaluated.

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- [3] Improving public health responses to extreme weather/heat-waves - EuroHEAT. Technical summary ([www.euro.who.int/data/assets/pdf\\_file/0010/95914/E92474.pdf](http://www.euro.who.int/data/assets/pdf_file/0010/95914/E92474.pdf)).
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## Urban Planning and Heat Protection

Professor Dr. Jürgen Baumüller, Institute of Landscape Planning and Ecology, University of Stuttgart, Germany. Email: [juergen.baumueller@web.de](mailto:juergen.baumueller@web.de)

In the ongoing discussion about city development and climate change [1], fundamental studies of climate are gaining increasing importance for producing qualified land use planning in densely settled areas. Since planning-related statements refer to specific areas, the use of climate maps as an informational basis is recommended. Climate maps are a very significant tool for planners and are also a meaningful method of communicating information for politicians and the interested public, as such, spatially-related cartographic representations (e.g. climate function maps) are necessary for attaining climatic and air-hygienic goals.

According to the fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) in 2007 [2], the global temperature will increase till 2100 by 1.5 to 4.5 degrees. In Germany, this will increase the maximum temperature to more than 40 °C in summertime. This is a new challenge for cities because due to the urban heat island effect (UHI) the temperatures in cities are higher than in the surroundings. In addition, the vulnerability of cities is high because more and more people will live in cities. Furthermore, the number of elderly people is increasing in many countries. In Germany, about 40% of the people will be older than 60 years in 2050.

For some years, there has been a discussion in Germany on urban climate change adaptation strategies. Some cities like Berlin, Hamburg and others started to work out concepts for climate adaptation and also strategies in regions are in discussion [3]. Because the vulnerability differs in various regions, special strategies are necessary. An important step on this way is to analyze the local climatic conditions and give predictions for the future [4].

### German Strategy for Adaptation to Climate Change

On 17 December 2008, the Federal Cabinet adopted the German Strategy for Adaptation to Climate Change (DAS) [5]. The strategy creates a framework for adapting to the impacts of climate change in Germany. It primarily describes the contribution of the Federation, thus acting as a guide for other actors. The strategy establishes the basis for a medium-term, step-by-step process undertaken in cooperation with the German federal states and other civil groups and aimed at assessing the risks of climate change, identifying the possible need for action, defining appropriate goals and developing and implementing options for adaptation measures also against heat. In the chapter about *Spatial, regional and physical development planning* it is mentioned:

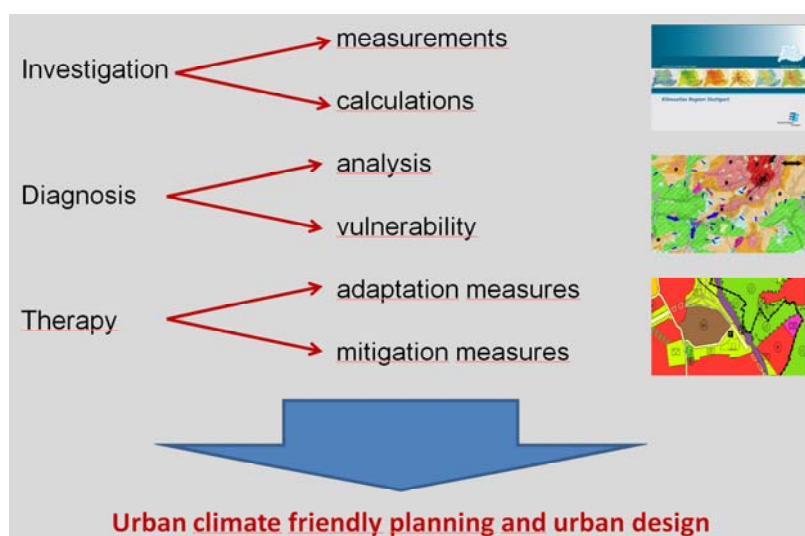


Fig. 1: The way to an urban climate friendly planning

“Spatial, regional and physical development planning represent the start of the risk avoidance chain, since they develop precautionary regional concepts, use planning documents which are legally binding and valid for long periods, and may involve long lead times before the contents of the plans are put into practice. Spatial planning has the important function of reconciling different claims on the same space. With the existing legal and planning instruments, spatial planning can support both mitigation and adaptation. The fact that natural hazards e.g. heat waves may occur more frequently can place restrictions on the use of natural resources.”

Spatial planning must take more account of bioclimatic stress areas in future considering health issues in settlement development. The frequency of hot periods will increase. The heat-waves in summer in the future will strengthen the “heat islands”, especially in densely populated areas like cities. This gains particular importance due to the increasing number of elderly people.

For the city climate it is necessary to look for good ventilation, by keeping free ventilation paths and cold air flow corridors [6]. Furthermore, the sealing of the soil surface should be reduced and greenery in the cities generally increased. Also the anthropogenic heat emissions from heating, industry and private traffic must be reduced.

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- [3] BBSR (2009): Raumentwicklungsstrategien zum Klimawandel – Vorstudie für Modellvorhaben
- [4] VRS Verband Region Stuttgart (Hrsg.) (2008): Klimaatlas Region Stuttgart
- [5] DAS (2008): Deutsche Anpassungsstrategie an den Klimawandel, Bundesregierung Deutschland
- [6] Baumüller Jürgen, Hoffmann Ulrich, Reuter Ulrich (2009): Städtebauliche Klimafibel - online - Hrsg. Wirtschaftsministerium Baden-Württemberg. ([www.staedtebauliche-klimafibel.de](http://www.staedtebauliche-klimafibel.de))

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## Prevention of heat-related health risks of the elderly in urban settings

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**Background:** Heat is an environmental hazard for human health. During the heat wave in 2003, more than 35.000 excess deaths occurred in Europe, most of them in urban settings due to the local modification of temperature, depending on given building structures. The elderly and persons with particular physical, social and environmental vulnerability were identified to be at highest risk [1-10]. Due to climate change more heat waves also in Germany are expected for the future [11, 12], requiring effective community based prevention strategies to avoid heat-related illness and deaths.

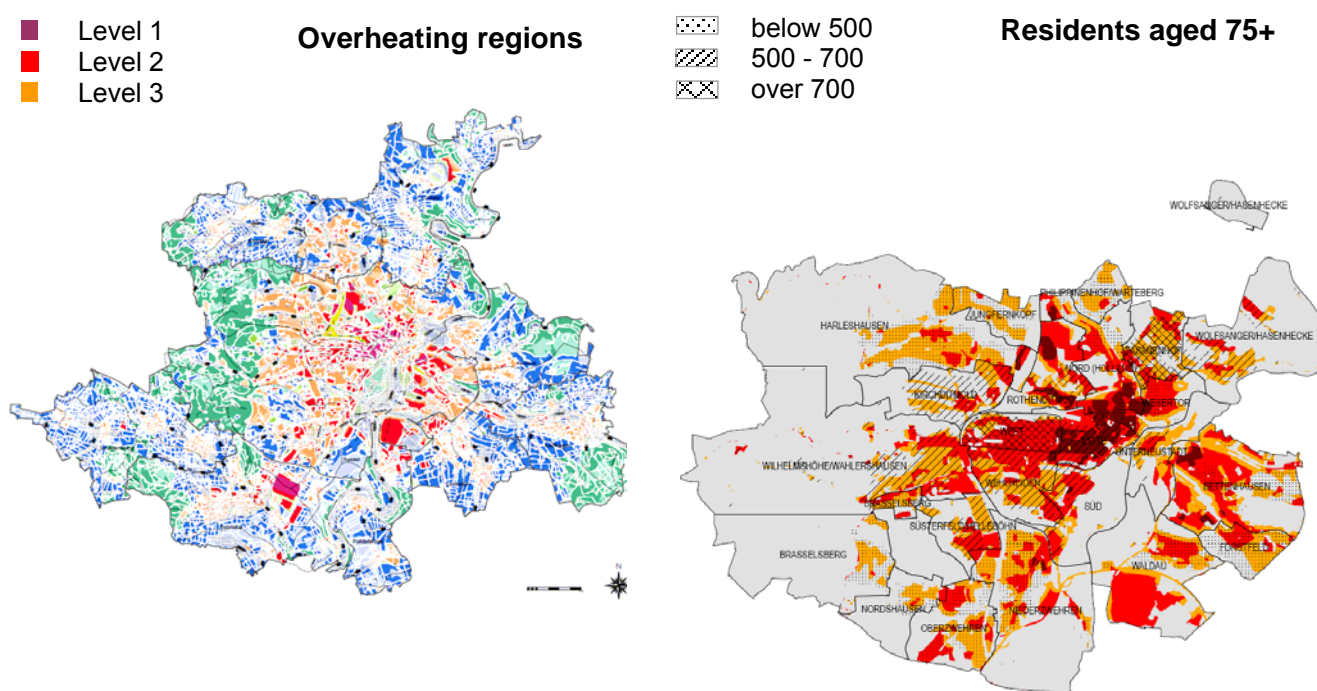
**Objectives:** Development, implementation and evaluation of short-, medium- and long-term measures to prevent health risks of the elderly caused by high heat exposure in urban settings. International recommendations stress multi-agency and intersectoral approaches, thus covering short-term and long-term measures, as success factors. The reduction of the exposure to heat is the most effective prevention strategy, thus requiring an adaptation of the built environment in the medium- and long-term.

**Methods:** Two high-risk regions (West and Lohfelden) were exemplarily identified through mapping microclimate data and socio-demographic data in the region Kassel, comprising Kassel city and Kas-



sel county [13] (figures 1 and 2). The local health authority initiated workshops with experts to identify and discuss needs for action. A steering group was established in each risk region to chair the network activities. The steering groups comprise representatives from local authorities, the health care sector and the civil society, building societies and town planners. A seniors committee advises the steering groups. Thematic work groups prepare short-term, medium-term and long-term actions. In regular public conferences, further activities are discussed and concluded. A monitoring system to assess heat-related mortality is in planning.

**Results and Conclusions:** A heat-prevention network of public and private stakeholders has been established. Short-, middle- and long-term network actions cover preventive home visits by the local health authority to assess individual heat-related health risks, heat warning phone service by the deaconesses' home Kassel, neighbourhood based heat warning and support systems and activities to improve the built environment. The commitment of housing cooperatives and building societies in the network activities is a promising contribution to a sustainable development of healthy environments for the elderly in urban settings.



**Fig. 1: Climate Map for the district Kassel, 1999**  
Source: Zweckverband Raum Kassel

**Fig. 2: Population of the elderly and overheating regions in Kassel city**

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## Publications and Resources

### [Creating a smoke-free society for children - report of the Royal Collage of Physicians \(RCP\)](#)

In March 2010, the Tobacco Advisory Group of the RCP launched a major new report entitled 'Passive smoking and children'. This report outlines how children are particularly vulnerable to passive smoke exposure, most of which occurs in the home. In the UK, about 2 million children currently live in a household where they are exposed to cigarette smoke and many more are exposed outside the home. Using evidence-based studies and additional analysis, the report contains alarming new estimates for key measures of health damage attributable to passive smoking, which for children each year causes over 20,000 cases of lower respiratory tract infection, 120,000 cases of middle ear disease, at least 22,000 new cases of wheeze and asthma, 200 cases of bacterial meningitis and 40 sudden infant deaths in the UK. As passive smoking is an involuntary exposure that is directly harmful to children, and increases the risk that the child will become a smoker, the report also gives an overview on possible policies to reduce the uptake and prevalence of smoking with the aim to create a smoke-free society for children.

### [Energy Performance of Buildings Directive \(EPBD\)](#)

The European Parliament passed the Energy Performance of Buildings Directive (EPBD) on May 18<sup>th</sup>, 2010. The new directive for building efficiency requires that all new buildings constructed in the European Union after 2021 require the standard of nearly zero-energy buildings. New buildings built by the public sector must meet these criteria two years earlier, by 2019. An intermediate evaluation is set for 2015, when EU member nations must show how they plan to achieve these goals.

### [Indoor NO<sub>2</sub> concentrations in dwellings next to urban traffic. A case study in Berlin.](#)

Fiedler J, Lüdecke A, Moriske H-J.  
*UMID* 2010 March; (1): 13-18.

Nitrogen dioxide (NO<sub>2</sub>) from outdoor air is known to be a major source of indoor air pollution if no other indoor sources are present. In a measurement programme the Federal Environment Agency

determines NO<sub>2</sub> levels in the indoor and outdoor air of eight flats in Berlin. The results showed that people living in the city and/or at major roads may be exposed to higher NO<sub>2</sub> levels in their flats. Overall, measured levels were relatively high in both indoor and outdoor air in the area investigated.

[The Indoor Environment Handbook - How to make Buildings healthier and comfortable](#)



Bluysen PM, published by Earthscan, ISBN 9781844077878, £ 49.99

Ensuring that buildings are healthy and comfortable for their occupants is a primary concern of all architects and building engineers. This highly practical handbook will help make that process more efficient and effective. It begins with a guide to how the human body and senses react to different indoor environmental conditions, together with basic information on the parameters of the indoor environment and problems that can occur. It then moves on to give a background to the development of the study and control of the indoor environment, examining the main considerations (including thermal, lighting, indoor air and sound-related aspects) for a healthy and comfortable indoor environment and discussing the drivers for change in the field. The final section presents a new approach towards health and comfort in the indoor environment, where meeting the wishes and demands of the occupants with a holistic strategy becomes the over-riding priority. The book is filled with useful facts, figures and analysis, and practical methods that designers who are keen to assess and improve the user experience of their buildings will find invaluable.

[WHO Handbook on Indoor Radon](#)

In *Strahlenschutzpraxis 2/2010*, 42-47, the content of the six chapters of *WHO Handbook on Indoor Radon* is briefly sketched by the author, Werner Preuse, and an evaluating comment is given on some points which leave room for interpretation or are disputed. Furthermore, the WHO Handbook on Indoor Radon lead the Health Physics Society to update their recommendations on Indoor Radon. [Update on Perspectives and Recommendations on Indoor Radon](#)

## Literature

In this section we will provide a collection of recent housing and health publications from a variety of backgrounds. Literature published in German or French, respectively, is indicated with the German flag  or the French flag .

If you have suggestions for interesting journals that we should screen for the literature collection, please let us know!

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## Allergies and Respiratory Diseases

### [Effects of early cat or dog ownership on sensitisation and asthma in a high-risk cohort without disease-related modification of exposure.](#)

Almqvist C, Garden F, Kemp AS, Li Q, Crisafulli D, Tovey ER, Xuan W, Marks GB; CAPS Investigators.

Paediatr Perinat Epidemiol. 2010 Mar;24(2):171-8.

### [Childhood asthma and early life exposure to indoor allergens, endotoxin and beta\(1,3\)-glucans.](#)

Bertelsen RJ, Carlsen KC, Carlsen KH, Granum B, Doekes G, Håland G, Mowinckel P, Løvik M.

Clin Exp Allergy. 2010 Feb;40(2):307-16.

### [Increased effect of obesity on asthma in adults with low household income.](#)

Chen Y, Bishop M, Liepold H.

J Asthma. 2010 Apr;47(3):263-8.

### [Breast-feeding, aeroallergen sensitization, and environmental exposures during infancy are determinants of childhood allergic rhinitis.](#)

Codispoti CD, Levin L, LeMasters GK, Ryan P, Reponen T, Villareal M, Burkle J, Stanforth S, Lockey JE, Khurana Hershey GK, Bernstein DI.

J Allergy Clin Immunol. 2010 May;125(5):1054-1060.e1.

### [The Urban Environment and Childhood Asthma study.](#)

Gern JE.

J Allergy Clin Immunol. 2010 Mar;125(3):545-9. Review.

### [COPD and chronic bronchitis risk of indoor air pollution from solid fuel: a systematic review and meta-analysis.](#)

Kurmi OP, Semple S, Simkhada P, Smith WC, Ayres JG.

Thorax. 2010 Mar;65(3):221-8. Review.

### [Effects of pet exposure in the first year of life on respiratory and allergic symptoms in 7-yr-old children. The SIDRIA-2 study.](#)

Lombardi E, Simoni M, La Grutta S, Viegi G, Bisanti L, Chellini E, Dell'Orco V, Migliore E, Petronio MG, Pistelli R, Rusconi F, Sestini P, Forastiere F, Galassi C; SIDRIA-2 Collaborative Group.

Pediatr Allergy Immunol. 2010 Mar;21(2 Pt 1):268-76.

### [Environmental determinants of and impact on childhood asthma by the bacterial community in household dust.](#)

Maier RM, Palmer MW, Andersen GL, Halonen MJ, Josephson KC, Maier RS, Martinez FD, Neilson JW, Stern DA, Vercelli D, Wright AL.

Appl Environ Microbiol. 2010 Apr;76(8):2663-7.

### [Geo-climate effects on asthma and allergic diseases in adults in Turkey: results of PARFAIT study.](#)

Metintas S, Kurt E; PARFAIT Study Group.

Int J Environ Health Res. 2010 Jun;20(3):189-99.

### [The role of housing type and housing quality in urban children with asthma.](#)

Northridge J, Ramirez OF, Stingone JA, Claudio L.

J Urban Health. 2010 Mar;87(2):211-24.

### [Environmental and occupational allergies.](#)

Peden D, Reed CE.

J Allergy Clin Immunol. 2010 Feb;125(2 Suppl 2):S150-60. Review.

### [A meta-analysis on wood dust exposure and risk of asthma](#)

Pérez-Ríos M, Ruano-Ravina A, Etminan M, Takkouche B

Allergy 2010 April; 65(4): 467-473.



[Pest and allergen exposure and abatement in inner-city asthma: a work group report of the American Academy of Allergy, Asthma & Immunology Indoor Allergy/Air Pollution Committee.](#)

Sheehan WJ, Rangsithienchai PA, Wood RA, Rivard D, Chinratanapisit S, Perzanowski MS, Chew GL, Seltzer JM, Matsui EC, Phipatanakul W.

J Allergy Clin Immunol. 2010 Mar;125(3):575-81. **Review.**

[Home air-conditioning, traffic exposure, and asthma and allergic symptoms among preschool children.](#)

Zuraimi MS, Tham KW, Chew FT, Ooi PL, Koh D.

Pediatr Allergy Immunol. 2010 Jun 14. [Epub ahead of print]

## Indoor Air

[Relationship between selected indoor volatile organic compounds, so-called microbial VOC, and the prevalence of mucous membrane symptoms in single family homes.](#)

Araki A, Kawai T, Eitaki Y, Kanazawa A, Morimoto K, Nakayama K, Shibata E, Tanaka M, Takigawa T, Yoshimura T, Chikara H, Saijo Y, Kishi R.

Sci Total Environ. 2010 Apr 15;408(10):2208-15.

[The state of indoor air quality in Pakistan--a review.](#)

Colbeck I, Nasir ZA, Ali Z.

Environ Sci Pollut Res Int. 2010 Jul;17(6):1187-96. **Review.**

[Identifying sources of lead exposure for children, with lead concentrations and isotope ratios.](#)

Glorennec P, Peyr C, Poupon J, Oulhote Y, Le Bot B.

J Occup Environ Hyg. 2010 May;7(5):253-60.

[Cytotoxicity and genotoxicity in human lung epithelial A549 cells caused by airborne volatile organic compounds emitted from pine wood and oriented strand boards.](#)

Gminski R, Tang T, Mersch-Sundermann V.

Toxicol Lett. 2010 Jun 16;196(1):33-41.

[Indoor contamination with hexabromocyclododecanes, polybrominated diphenyl ethers, and perfluoroalkyl compounds: an important exposure pathway for people?](#)

Harrad S, de Wit CA, Abdallah MA, Bergh C, Björklund JA, Covaci A, Darnerud PO, de Boer J, Diamond M, Huber S, Leonards P, Mandalakis M, Ostman C, Haug LS, Thomsen C, Webster TF.

Environ Sci Technol. 2010 May 1;44(9):3221-31. **Review.**

[Short-term airing by natural ventilation - implication on IAQ and thermal comfort.](#)

Heiselberg P, Perino M.

Indoor Air 2010 April 20(2): 126-140.

[Decreasing concentrations of volatile organic compounds \(VOC\) emitted following home renovations.](#)

Herbarth O, Matysik S.

Indoor Air 2010 April 20(2): 141-146.

[Risk of atopy associated with microbial components in house dust.](#)

von Hertzen L, Hyvärinen A, Laatikainen T, Mäkelä MJ, Nevalainen A, Vartiainen E, Hahtela T.

Ann Allergy Asthma Immunol. 2010 Mar;104(3):269-70.

[Exposure of pregnant women to indoor air pollution: a study from nine low and middle income countries.](#)

Kadir MM, McClure EM, Goudar SS, Garces AL, Moore J, Onyamboko M, Kaseba C, Althabe F, Castilla EE, Freire S, Parida S, Saleem S, Wright LL, Goldenberg RL; Global Network Tobacco Study Group.

Acta Obstet Gynecol Scand. 2010;89(4):540-8.

[Micronucleus formation, DNA damage and repair in premenopausal women chronically exposed to high level of indoor air pollution from biomass fuel use in rural India.](#)

Mondal NK, Mukherjee B, Das D, Ray MR.  
Mutat Res. 2010 Mar 29;697(1-2):47-54.

[Who's in charge of children's environmental health at school?](#)

Paulson J, Barnett C.  
New Solut. 2010;20(1):3-23.

[Long-term exposure to indoor air pollution and wheezing symptoms in infants.](#)

Raaschou-Nielsen O, Hermansen MN, Loland L, Buchvald F, Pipper CB, Sørensen M, Loft S, Bisgaard H.  
Indoor Air 2010 April 20(2): 159-167.

[PBDEs in 2-5 year-old children from California and associations with diet and indoor environment.](#)

Rose M, Bennett DH, Bergman A, Fångström B, Pessah IN, Hertz-Picciotto I.  
Environ Sci Technol. 2010 Apr 1;44(7):2648-53.

[Current exposure to persistent polychlorinated biphenyls \(PCBs\) and dichlorodiphenyldichloroethylene \(p,p'-DDE\) of Belgian students from food and dust.](#)

Roosens L, Abdallah MA, Harrad S, Neels H, Covaci A.  
Environ Sci Technol. 2010 Apr 15;44(8):2870-5.

[Exposure of the Flemish population to brominated flame retardants: model and risk assessment.](#)

Roosens L, Cornelis C, D'Hollander W, Bervoets L, Reynders H, Van Campenhout K, Van Den Heuvel R, Neels H, Covaci A.  
Environ Int. 2010 May;36(4):368-76.

[Sick building syndrome in relation to domestic exposure in Sweden - A cohort study from 1991 - 2001.](#)

Sahlberg B, Wieslander G, and Norbäck D.  
Scand J Public Health 2010 May;38 232-238.

[School air quality related to dry cough, rhinitis and nasal patency in children.](#)

Simoni M, Annesi-Maesano I, Sigsgaard T, Norback D, Wieslander G, Nystad W, Canciani M, Sestini P, Viegi G.  
Eur Respir J. 2010 Apr;35(4):742-9.

[Relationship between indoor chemical concentrations and subjective symptoms associated with sick building syndrome in newly built houses in Japan.](#)

Takigawa T, Wang BL, Saijo Y, Morimoto K, Nakayama K, Tanaka M, Shibata E, Yoshimura T, Chikara H, Ogino K, Kishi R.  
Int Arch Occup Environ Health. 2010 Feb;83(2):225-35.

[Reactions of ozone with human skin lipids: sources of carbonyls, dicarbonyls, and hydroxycarbonyls in indoor air.](#)

Wisthaler A, Weschler CJ.  
Proc Natl Acad Sci U S A. 2010 Apr 13;107(15):6568-75.

[Residential air exchange rates in three major US metropolitan areas: results from the Relationship Among Indoor, Outdoor, and Personal Air Study 1999-2001.](#)

Yamamoto N, Shendell DG, Winer AM, Zhang J.  
Indoor Air. 2010 Feb;20(1):85-90.

[Environmental health in China: progress towards clean air and safe water.](#)

Zhang J, Mauzerall DL, Zhu T, Liang S, Ezzati M, Remais JV.  
Lancet. 2010 Mar 27;375(9720):1110-9. Review.

[Perfluorochemicals in meat, eggs and indoor dust in China: assessment of sources and pathways of human exposure to perfluorochemicals.](#)

Zhang T, Sun HW, Wu Q, Zhang XZ, Yun SH, Kannan K.  
Environ Sci Technol. 2010 May 1;44(9):3572-9.

## Mould and Dampness

### [Indoor fungal composition is geographically patterned and more diverse in temperate zones than in the tropics](#)

Amend AS, Seifert KA, Samson R, Bruns TD

PNAS 2010 June 28, published ahead of print doi:10.1073/pnas.1000454107

### [Mold exposure and health effects following hurricanes Katrina and Rita.](#)

Barbeau DN, Grimsley LF, White LE, El-Dahr JM, Lichtveld M.

Annu Rev Public Health. 2010 Apr 21;31:165-78 1 p following 178. **Review.**

### [Allergic fungal rhinitis and rhinosinusitis.](#)

Hamilos DL.

Proc Am Thorac Soc. 2010 May;7(3):245-52.

### [Indoor wet cells harbour melanized agents of cutaneous infection.](#)

Lian X, de Hoog GS.


Med Mycol. 2010 May 7;48(4):622-8.

### [\[Moulds in dwellings: health risks and involved species\]](#)

Reboux G, Bellanger AP, Roussel S, Grenouillet F, Millon L.

Rev Mal Respir. 2010 Feb;27(2):169-79. Epub 2010 Jan 25. **Review.** ■ ■

### [Umweltmedizin in Forschung und Praxis - 15 UFP \(2\) 2010](#)

Issue 15(2) 2010 of *Umweltmedizin in Forschung und Praxis* presents a series of articles on moulds and their possible health effects. Moreover, the detailed report on the first workshop "Schimmelpilze und schwere Grunderkrankungen – welches Risiko ist damit verbunden?" held on the last annual meeting of „Gesellschaft und Hygiene, Umweltmedizin und Präventivmedizin“ (GHUP) in 2009 is available in this issue. 

## Light and Radiation

### [Comparison of advertising strategies between the indoor tanning and tobacco industries.](#)

Greenman J, Jones DA.

J Am Acad Dermatol. 2010 Apr;62(4):685.e1-18.

### [Addictive-like behaviours to ultraviolet light among frequent indoor tanners.](#)

Harrington CR, Beswick TC, Leitenberger J, Minhajuddin A, Jacobe HT, Adinoff B.

Clin Exp Dermatol. 2010 Jun 7.

### [Effect of seasonal affective disorder and pathological tanning motives on efficacy of an appearance-focused intervention to prevent skin cancer.](#)

Hillhouse J, Turrisi R, Stapleton J, Robinson J.

Arch Dermatol. 2010 May;146(5):485-91.

### [Indoor tanning and risk of melanoma: a case-control study in a highly exposed population.](#)

Lazovich D, Vogel RI, Berwick M, Weinstock MA, Anderson KE, Warshaw EM.

Cancer Epidemiol Biomarkers Prev. 2010 Jun;19(6):1557-68.

### [Addiction to indoor tanning: relation to anxiety, depression, and substance use.](#)

Mosher CE, Danoff-Burg S.

Arch Dermatol. 2010 Apr;146(4):412-7.

### [A pilot study on natural radioactivity in schools of south-east Italy.](#)

Trevisi R, Caricato A, D'Alessandro M, Fernández M, Leonardi F, Luches A, Tonnarini S, Veschetti M.

Environ Int. 2010 April;36(3):276-80.

[Brain tumor risk in relation to mobile telephone use: Results of the INTERPHONE international case-control study.](#)

Int J Epidemiol. 2010; 1-20. [Free full text.](#)

Mobile phone use has increased dramatically since its introduction in the early-to-mid 1980s. The expanding use of this technology has been accompanied by concerns about health and safety. In the late 1990s, several expert groups critically reviewed the evidence on health effects of low-level exposure to radiofrequency (RF) electromagnetic fields, and recommended research into the possible adverse health effects of mobile telephone use. Now, the Interphone Study Group published the results of this interview-based case-control study, which included 2708 glioma and 2409 meningioma cases and matched controls. The Interphone Study Group concluded that no elevated OR for these forms of brain cancer was observed  $\geq 10$  years after first phone use. There were suggestions of an increased risk of glioma, and much less so meningioma, in the highest decile of cumulative call time, in subjects who reported usual phone use on the same side of the head as their tumour and, for glioma, for tumours in the temporal lobe. However, a reduced OR for glioma and meningioma related to ever having been a regular mobile phone user possibly reflects participation bias or other methodological limitations. Biases and errors limit the strength of the conclusions that can be drawn from these analyses and prevent a causal interpretation.

For further information please see also the press release of the *International Agency for Research on Cancer* and the *World Health Organisation (WHO)*

[http://www.iarc.fr/en/media-centre/pr/2010/pdfs/pr200\\_E.pdf](http://www.iarc.fr/en/media-centre/pr/2010/pdfs/pr200_E.pdf)

### **Smoking / Environmental Tobacco Smoke**

Smoking and Environmental Tobacco Smoke play an important role in housing and health topics. However, it would go beyond the scope of this newsletter to present here all relevant literature on ETS. We therefore decided to list only selected literature. For further information, we wish you to refer to [WHO Collaborating Centre on Tobacco Control](#).

[Health impact assessment of environmental tobacco smoke in European children: sudden infant death syndrome and asthma episodes.](#)

Boldo E, Medina S, Oberg M, Puklová V, Mekel O, Patja K, Dalbokova D, Krzyzanowski M, Posada M.

Public Health Rep. 2010 May-Jun;125(3):478-87.

[An intervention to reduce environmental tobacco smoke exposure improves pregnancy outcomes.](#)

El-Mohandes AA, Kiely M, Blake SM, Gantz MG, El-Khorazaty MN.

Pediatrics. 2010 Apr;125(4):721-8.

[Second-hand smoke, cotinine levels, and risk of circulatory mortality in a large cohort study of never-smokers.](#)

Gallo V, Neasham D, Airoidi L, Ferrari P, Jenab M, Boffetta P, Overvad K, Tjønneland A, Clavel-Chapelon F, Boeing H, Pala V, Palli D, Panico S, Tumino R, Arriola L, Lund E, Bueno-De-Mesquita B, Peeters PH, Melander O, Hallmans G, Riboli E, Saracci R, Vineis P.

Epidemiology. 2010 Mar;21(2):207-14.

[Prevalence and predictors of smoke-free policy implementation and support among owners and managers of multiunit housing.](#)

King BA, Travers MJ, Cummings KM, Mahoney MC, Hyland AJ.

Nicotine Tob Res. 2010 Feb;12(2):159-63.

[Maternal passive smoking and risk of cleft lip with or without cleft palate.](#)

Li Z, Liu J, Ye R, Zhang L, Zheng X, Ren A.

Epidemiology. 2010 Mar;21(2):240-2.

[Second hand smoke \(SHS\) exposure in children. An evaluation of a preventative measure.](#)

Precioso J, Samorinha C, Calheiros JM, Macedo M, Antunes H, Campos H.  
Rev Port Pneumol. 2010 Jan-Feb;16(1):57-72. English, Portuguese.

[Prenatal and postnatal tobacco exposure and behavioral problems in 10-year-old children: results from the GINI-plus prospective birth cohort study.](#)

Rückinger S, Rzehak P, Chen CM, Sausenthaler S, Koletzko S, Bauer CP, Hoffmann U, Kramer U, Berdel D, von Berg A, Bayer O, Wichmann HE, von Kries R, Heinrich J; GINI-plus Study Group.  
Environ Health Perspect. 2010 Jan;118(1):150-4.

[Environmental tobacco smoke exposure and perinatal outcomes: a systematic review and meta-analyses.](#)

Salmasi G, Grady R, Jones J, McDonald SD; Knowledge Synthesis Group.  
Acta Obstet Gynecol Scand. 2010;89(4):423-41. Review.

[Secondhand smoke as a potential cause of chronic rhinosinusitis: a case-control study.](#)

Tammemagi CM, Davis RM, Benninger MS, Holm AL, Krajenta R.  
Arch Otolaryngol Head Neck Surg. 2010 Apr;136(4):327-34.

[Cigarette smoking, environmental tobacco smoke exposure and pancreatic cancer risk in the European Prospective Investigation into Cancer and Nutrition.](#)

Vrieling A, Bueno-de-Mesquita HB, Boshuizen HC, Michaud DS, Severinsen MT, Overvad K, Olsen A, Tjønneland A, Clavel-Chapelon F, Boutron-Ruault MC, Kaaks R, Rohrmann S, Boeing H, Nöthlings U, Trichopoulou A, Moutsiou E, Dilis V, Palli D, Krogh V, Panico S, Tumino R, Vineis P, van Gils CH, Peeters PH, Lund E, Gram IT, Rodríguez L, Agudo A, Larrañaga N, Sánchez MJ, Navarro C, Barriarte A, Manjer J, Lindkvist B, Sund M, Ye W, Bingham S, Khaw KT, Roddam A, Key T, Boffetta P, Duell EJ, Jenab M, Gallo V, Riboli E.  
Int J Cancer. 2010 May 15;126(10):2394-403.

[Environmental tobacco use and indicators of metabolic syndrome in Chinese adults.](#)

Xie B, Palmer PH, Pang Z, Sun P, Duan H, Johnson CA.  
Nicotine Tob Res. 2010 Mar;12(3):198-206.

## Home Safety

[Unintentional child poisonings through ingestion of conventional and novel tobacco products.](#)

Connolly GN, Richter P, Aleguas A Jr, Pechacek TF, Stanfill SB, Alpert HR.  
Pediatrics. 2010 May;125(5):896-9.

[A self-report home environment screening tool identified older women at risk of falls.](#)

Hassani Mehraban A, Mackenzie LA, Byles JE.  
J Clin Epidemiol. 2010 Jun 14.

[Physical therapy approaches to reduce fall and fracture risk among older adults.](#)

Karinkanta S, Piirtola M, Sievänen H, Uusi-Rasi K, Kannus P.  
Nat Rev Endocrinol. 2010 Jul;6(7):396-407.

[A profile of hospital-admitted paediatric burns patients in South Africa.](#)

Parbhoo A, Louw QA, Grimmer-Somers K.  
BMC Res Notes. 2010 Jun 11;3:165.

[Child home injury mortality in Europe: a 16-country analysis.](#)

Sengoelge M, Hasselberg M, Laflamme L.  
Eur J Public Health. 2010 Apr 29. [Epub ahead of print]

[Determining if an older adult can make and execute decisions to live safely at home: a capacity assessment and intervention model.](#)

Skelton F, Kunik ME, Regev T, Naik AD.  
Arch Gerontol Geriatr. 2010 May-Jun;50(3):300-5.



[Barriers and enablers to the use of measures to prevent pediatric scalding in Cape Town, South Africa.](#)


Van Niekerk A, Menckel E, Laflamme L.  
Public Health Nurs. 2010 May-Jun;27(3):203-20.

[The characteristics of elderly burns in Shanghai.](#)

Yin Z, Qin Z, Xin W, Gomez M, Zhenjiang L.  
Burns. 2010 May;36(3):430-5.

## Housing and Ageing Society

[The social city and the elderly](#)

Böhme C, Franke T.  
Z Gerontol Geriatr. 2010 Apr;43(2):86-90. 

[Advantage and choice: social relationships and staff assistance in assisted living.](#)

Burge S, Street D.  
J Gerontol B Psychol Sci Soc Sci. 2010 May;65B(3):358-69.

[Elderly persons in the risk zone. Design of a multidimensional, health-promoting, randomised three-armed controlled trial for "prefrail" people of 80+ years living at home.](#)

Dahlin-Ivanoff S, Gosman-Hedström G, Edberg AK, Wilhelmson K, Eklund K, Duner A, Ziden L, Welmer AK, Landahl S.  
BMC Geriatr. 2010 May 26;10:27.

[Community environmental factors are associated with disability in older adults with functional limitations: the MOST study.](#)

Keysor JJ, Jette AM, LaValley MP, Lewis CE, Torner JC, Nevitt MC, Felson DT; Multicenter Osteoarthritis (MOST) group.  
J Gerontol A Biol Sci Med Sci. 2010 Apr;65(4):393-9.

[Community falls prevention for people who call an emergency ambulance after a fall: randomised controlled trial.](#)

Logan PA, Coupland CA, Gladman JR, Sahota O, Stoner-Hobbs V, Robertson K, Tomlinson V, Ward M, Sach T, Avery AJ.  
BMJ. 2010 May 11;340:c2102. doi: 10.1136/bmj.c2102.

[Older adults' perceived physical activity enablers and barriers: a multicultural perspective.](#)

Mathews AE, Laditka SB, Laditka JN, Wilcox S, Corwin SJ, Liu R, Friedman DB, Hunter R, Tseng W, Logsdon RG.  
J Aging Phys Act. 2010 Apr;18(2):119-40.

[Towards Global Age-Friendly Cities: Determining Urban Features that Promote Active Aging.](#)

Plouffe L, Kalache A.  
J Urban Health. 2010 Jun 12. [Epub ahead of print]

## Housing Conditions

[Enhancement of a virtual reality wheelchair simulator to include qualitative and quantitative performance metrics.](#)

Assist Technol. 2010 Spring;22(1):20-31.  
Harrison CS, Grant PM, Conway BA.

[Assessing housing quality and its impact on health, safety and sustainability.](#)

Keall M, Baker MG, Howden-Chapman P, Cunningham M, Ormandy D.  
J Epidemiol Community Health. 2010 Jun 1.

[Housing and health promotion: moving forward.](#)

Lawrence RJ.

Int J Public Health. 2010 Feb 9. [Epub ahead of print]

[Social and environmental stressors in the home and childhood asthma.](#)

Suglia SF, Duarte CS, Sandel MT, Wright RJ.

J Epidemiol Community Health. 2010 May 12.

[Environmental health in China: progress towards clean air and safe water.](#)

Zhang J, Mauzerall DL, Zhu T, Liang S, Ezzati M, Remais JV.

Lancet. 2010 Mar 27;375(9720):1110-9. Review.

## Housing and Mental Health

[Socio-demographic, psychosocial and health characteristics of Norwegian senior centre users: a cross-sectional study.](#)

Bøen H, Dalgard OS, Johansen R, Nord E.

Scand J Public Health. 2010 Jul;38(5):508-17.

[What policies and policy processes are needed to ensure that people with psychiatric disabilities have access to appropriate housing?](#)

Battams S, Baum F.

Soc Sci Med. 2010 Apr;70(7):1026-34.

["Under My Umbrella": the housing experiences of HIV positive parents who live with and care for their children in Ontario.](#)

Greene S, Tucker R, Rourke SB, Monette L, Koornstra J, Sobota M, Byers S, Hwang S, Dunn J, Guenter D, Ahluwalia A, Watson J.

Arch Womens Ment Health. 2010 Jun;13(3):223-32.

[Rural-urban migration patterns and mental health diagnoses of adolescents and young adults in British Columbia, Canada: a case-control study.](#)

Maggi S, Ostry A, Callaghan K, Hershler R, Chen L, D'Angiulli A, Hertzman C.

Child Adolesc Psychiatry Ment Health. 2010 May 13;4:13.

## Thermal Comfort / Energy

[Living in utility scarcity: energy and water insecurity in Northwest Alaska.](#)

Eichelberger LP.

Am J Public Health. 2010 Jun;100(6):1010-8.

[The effect of temperature on hospital admissions in nine California counties.](#)

Green RS, Basu R, Malig B, Broadwin R, Kim JJ, Ostro B.

Int J Public Health. 2010 Apr;55(2):113-21.

[Temperature, comfort and pollution levels during heat waves and the role of sea breeze.](#)

Papanastasiou DK, Melas D, Bartzanas T, Kittas C.

Int J Biometeorol. 2010 May;54(3):307-17.

[Thermal comfort: research and practice.](#)

van Hoof J, Mazej M, Hensen JL.

Front Biosci. 2010 Jan 1;15:765-88. Review.

**Urban Planning / Built Environment**[Factors related to short-term memory dysfunction in children residing near a Petrochemical Industrial Estate.](#)

Aungudornpukdee P, Vichit-Vadakan N, Taneepanichskul S.  
J Med Assoc Thai. 2010 Mar;93(3):285-92.

[Associations between street connectivity and active transportation.](#)

Berrigan D, Pickle LW, Dill J.  
Int J Health Geogr. 2010 Apr 23;9:20.

[Neighborhoods and obesity in New York City.](#)

Black JL, Macinko J, Dixon LB, Fryer GE Jr.  
Health Place. 2010 May;16(3):489-99.

[The changing distribution and determinants of obesity in the neighborhoods of New York City, 2003-2007.](#)

Black JL, Macinko J.  
Am J Epidemiol. 2010 Apr 1;171(7):765-75.

[Built and socioeconomic environments: patterning and associations with physical activity in U.S. adolescents.](#)

Boone-Heinonen J, Evenson KR, Song Y, Gordon-Larsen P.  
Int J Behav Nutr Phys Act. 2010 May 20;7:45.

[Built environment, parents' perception, and children's vigorous outdoor play.](#)

Bringolf-Isler B, Grize L, Mäder U, Ruch N, Sennhauser FH, Braun-Fahrlander C; SCARPOL team.  
Prev Med. 2010 May-Jun;50(5-6):251-6.

[The active city? Disparities in provision of urban public recreation resources.](#)

Dahmann N, Wolch J, Joassart-Marcelli P, Reynolds K, Jerrett M.  
Health Place. 2010 May;16(3):431-45.

[Feasibility and utility of mapping disease risk at the neighbourhood level within a Canadian public health unit: an ecological study.](#)

Holowaty EJ, Norwood TA, Wanigaratne S, Abellan JJ, Beale L.  
Int J Health Geogr. 2010 May 10;9:21.

[Environmental metrics for community health improvement.](#)

Jakubowski B, Frumkin H.  
Prev Chronic Dis. 2010 Jul;7(4):A76

[Automobile traffic around the home and attained body mass index: a longitudinal cohort study of children aged 10-18 years.](#)

Jerrett M, McConnell R, Chang CC, Wolch J, Reynolds K, Lurmann F, Gilliland F, Berhane K.  
Prev Med. 2010 Jan;50 Suppl 1:S50-8.

[The influence of neighborhood environment on the incidence of childhood asthma: a propensity score approach.](#)

Juhn YJ, Qin R, Urm S, Katusic S, Vargas-Chanes D.  
J Allergy Clin Immunol. 2010 Apr;125(4):838-843.e2.

[Deconstructing Williamsburg: Using focus groups to examine residents' perceptions of the building of a walkable community.](#)

Kaczynski AT, Sharratt MT.  
Int J Behav Nutr Phys Act. 2010 May 27;7:50.

[Nationwide study of sick house syndrome: comparison of indoor environment of newly built dwellings between Sapporo city and Southern areas including those in Honshu and Kyushu.](#)

Kanazawa A, Saijo Y, Tanaka M, Yoshimura T, Chikara H, Takigawa T, Morimoto K, Nakayama K, Shibata E, Kishi R.  
Nippon Eiseigaku Zasshi. 2010 May;65(3):447-58.

[Do neighborhood environments moderate the effect of physical activity lifestyle interventions in adults?](#)

Kerr J, Norman GJ, Adams MA, Ryan S, Frank L, Sallis JF, Calfas KJ, Patrick K.  
Health Place. 2010 May 11.

[Exploring the role of the built and social neighborhood environment in moderating stress and health.](#)

Matthews SA, Yang TC.  
Ann Behav Med. 2010 May;39(2):170-83.

[Physical activity resources and changes in walking in a cohort of older men.](#)

Michael YL, Perdue LA, Orwoll ES, Stefanick ML, Marshall LM;  
Osteoporotic Fractures in Men Study Group.  
Am J Public Health. 2010 Apr;100(4):654-60.

[Parent perceptions of neighborhood stressors are associated with general health and child respiratory health among low-income, urban families.](#)

Quinn K, Kaufman JS, Siddiqi A, Yeatts KB.  
J Asthma. 2010 Apr;47(3):281-9.

[Walking trips to parks: exploring demographic, environmental factors, and preferences for adults with children in the household.](#)

Tilt JH.  
Prev Med. 2010 Jan;50 Suppl 1:S69-73.

[The built environment and location-based physical activity.](#)

Troped PJ, Wilson JS, Matthews CE, Cromley EK, Melly SJ.  
Am J Prev Med. 2010 Apr;38(4):429-38.

[Sense of community and its relationship with walking and neighborhood design.](#)

Wood L, Frank LD, Giles-Corti B.  
Soc Sci Med. 2010 May;70(9):1381-90.

[The role of social and built environments in predicting self-rated stress: A multilevel analysis in Philadelphia.](#)

Yang TC, Matthews SA.  
Health Place. 2010 Apr 14.

## Climate Change and Housing

### [Climate changes health](#)

The special issue April 2010 (Vol. 55/2) of [International Journal of Public Health](#) assembles a series of articles under the heading of *Climate Changes Health*. The authors discuss the various health effects of global warming under epidemiological and public health viewpoints and give an overview on the impacts (hospital admissions, mortality) of recent heat waves in California.

### [Health effects of hot weather: from awareness of risk factors to effective health protection.](#)

Hajat S, O'Connor M, Kosatsky T.  
Lancet. 2010 Mar 6;375(9717):856-63. **Review.**

### [A simple method for estimating excess mortality due to heat waves, as applied to the 2006 California heat wave.](#)

Hoshiko S, English P, Smith D, Trent R.  
Int J Public Health. 2010 Apr;55(2):133-7.

### [The impact of the 2003 heat wave on mortality in Shanghai, China.](#)

Huang W, Kan H, Kovats S.  
Sci Total Environ. 2010 May 1;408(11):2418-20.

[What effect will a few degrees of climate change have on human heat balance? Implications for human activity.](#)

Maloney SK, Forbes CF.  
Int J Biometeorol. 2010 May 12.

[Climate change and thermal bioclimate in cities: impacts and options for adaptation in Freiburg, Germany.](#)

Matzarakis A, Endler C.  
Int J Biometeorol. 2010 Jul;54(4):479-83.

[Heat-related illnesses during the 2003 heat wave in an emergency service.](#)

Oberlin M, Tubery M, Cances-Lauwers V, Ecoiffier M, Lauque D.  
Emerg Med J. 2010 Apr;27(4):297-9.

[Extreme temperature episodes and mortality in Yakutsk, East Siberia.](#)

Revich BA, Shaposhnikov DA.  
Rural Remote Health. 2010 Apr-Jun;10(2):1338.

[Heat waves observed in 2007 in Athens, Greece: synoptic conditions, bioclimatological assessment, air quality levels and health effects.](#)

Theoharatos G, Pantavou K, Mavrakis A, Spanou A, Katavoutas G, Efstathiou P, Mpekas P, Asimakopoulos D.  
Environ Res. 2010 Feb;110(2):152-61.

## **Social inequality and Housing**

[Prevalence of childhood disability and the characteristics and circumstances of disabled children in the UK: secondary analysis of the Family Resources Survey.](#)

Blackburn CM, Spencer NJ, Read JM.  
BMC Pediatr. 2010 Apr 16;10:21.

[Neighbourhoods and child adiposity: a critical appraisal of the literature.](#)

Carter MA, Dubois L.  
Health Place. 2010 May;16(3):616-28. Review.

[House value as an indicator of cumulative wealth is strongly related to morbidity and mortality risk in older people: a census-based cross-sectional and longitudinal study.](#)

Connolly S, O'Reilly D, Rosato M.  
Int J Epidemiol. 2010 Apr;39(2):383-91.

[Multiple risk exposure as a potential explanatory mechanism for the socioeconomic status-health gradient.](#)

Evans GW, Kim P.  
Ann N Y Acad Sci. 2010 Feb;1186:174-89.

[Cumulative hardship and wellness of low-income, young children: multisite surveillance study.](#)

Frank DA, Casey PH, Black MM, Rose-Jacobs R, Chilton M, Cutts D, March E, Heeren T, Coleman S, de Cuba SE, Cook JT.  
Pediatrics. 2010 May;125(5):e1115-23.

[Association of diarrhoea, poor hygiene and poor social conditions in childhood with blood pressure in adulthood.](#)

Kauhanen L, Lynch JW, Lakka HM, Kauhanen J, Smith GD.  
J Epidemiol Community Health. 2010 May;64(5):394-9.

[Development of a Deprivation Index and its relation to premature mortality due to diseases of the circulatory system in Hungary, 1998-2004.](#)

Juhász A, Nagy C, Páldy A, Beale L.  
Soc Sci Med. 2010 May;70(9):1342-9.



[Perceived neighbourhood environmental characteristics and physical activity according to socioeconomic status in adolescent girls.](#)

Mota J, Santos R, Pereira M, Teixeira L, Santos MP.  
Ann Hum Biol. 2010 Jun 9.

## Noise

### [Noise and Sleep](#)

The special issue April-June 2010 (Vol. 12/47) of [Noise and Health](#) assembles a series of articles under the heading of *Noise and Sleep*. Sleep may be negatively affected by external stimuli like noise, aircraft and traffic noise e.g., and chronic sleep loss is a common problem in today's society that may have significant health repercussions such as cognitive impairment, and depressed mood, and negative effects on cardiovascular, endocrine, and immune function.

### [Strategic environmental noise mapping: methodological issues concerning the implementation of the EU Environmental Noise Directive and their policy implications.](#)

Murphy E, King EA.  
Environ Int. 2010 Apr;36(3):290-8. **Review.**

### [The associations between noise sensitivity, reported physical and mental health, perceived environmental quality, and noise annoyance.](#)

Schreckenber D, Griefahn B, Meis M.  
Noise Health. 2010 Jan-Mar;12(46):7-16.

### [Noisy Days, Noisy Nights](#)

David Sharp  
J Urban Health 2010 March 25; Epub.

Noise as an ambient pollutant was neglected for a long time, as the definition of noise ("unwanted sound") is highly subjective. Its human impact shades from mere annoyance to serious health hazards like hearing damage or even ischemic heart disease. The author gives an overview of the relevant studies published within the last few years and points out that the hormonal consequences of ambient noise due to stress should deserve much more attention.

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## Event Announcements

In this section we will inform you about upcoming events with relevance to housing and health. If you know of any international event, please let us know!

### **20<sup>th</sup> IUHPE World Conference on Health Promotion**

Date: July 11-15, 2010

Venue: Geneva, Switzerland

Further Information: [20th IUHPE World Conference on Health Promotion](#)

### **13th Colloquium on Environmental Toxicology**

Housing Climate and Health

Date: July 21, 2010

Venue: Stuttgart, Germany

Further Information: [Baden-Württemberg State Health Office](#) 

**7<sup>th</sup> International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings**

Date: August 15-18, 2010

Venue: Syracuse, New York, USA

Further Information: [IAQVEC](#)**15<sup>th</sup> International Union of Air Pollution Prevention and Environmental Protection Associations' World Clean Air Congress**

Date: September 12-16, 2010

Venue: Vancouver, Canada

Further Information: [IUAPPA](#)**Fachtagung für biogene Schadstoffe & Gesundheit**

Date: September 13-17, 2010

Venue: Berlin, Germany

Further Information: [Verein für Wasser-, Boden- und Lufthygiene \(WaBoLu\)](#) **9. Fachkongress der Arbeitsgemeinschaft ökologischer Forschungsinstituten (AGÖF)**

Date: September 23-24, 2010

Venue: Nuremberg, Germany

Further Information: [Arbeitsgemeinschaft ökologischer Forschungsinstitute AGÖF](#) **4<sup>th</sup> GHUP Annual Meeting 2010 - Society of Hygiene, Environmental and Public Health Sciences (GHUP)**

Date: September 29 - October 02, 2010

Venue: Aachen, Germany

Further Information: [GHUP / University Hospital Aachen](#)**ises isee 2010**

2010 Joint Conference of International Society of Exposure Science &amp; International Society for Environmental Epidemiology

Date: August 29 - September 1, 2010

Venue: Seoul, Korea

Further Information: [isesisee2010](#)**REHACARE Kongress Wohn(t)raum**

Congress on accessible housing in collaboration with Messe Düsseldorf

Date: October 6-7, 2010

Venue: Düsseldorf, Germany

Further Information: [Internationale Fachmesse & Kongress für Menschen mit Behinderungen und Pflegebedarf - REHACARE Messe](#) **Indoor Air 2011**

International Society of Indoor Air Quality and Climate (ISIAQ)

Date: June 5-10, 2011

Venue: Austin, Texas, USA

Further Information: [ISIAQ](#)**Air Quality Eight**

Date: October 24-27, 2011

Venue: Arlington, Virginia, USA

Further Information: [Air Quality VIII](#)**19<sup>th</sup> International Congress of Biometeorology**

Date: December 5-9, 2011

Venue: Auckland, New Zealand

Further Information: [ICB 2011](#)

## Message Board

In this section we will inform you about activities and projects related to housing and health that are being carried out by WHO or the WHO CC. This may relate to ongoing activities and projects, as well as invitations to participate in data collections or case study projects.

### **WHO work on indoor and built environments**

#### **Social inequalities and healthy housing**

Following the WHO Fifth Ministerial Conference on Environment and Health (March, 2010, Italy), WHO has published a large **review of evidence on environmental health inequalities** in Europe which had been provided as a background document to the conference participants. The review features a variety of chapters summarizing the state of knowledge on environmental inequalities in Europe, e.g. in relation to **housing and residential location; injuries; air quality; waste**; and in relation to **children**. The review report is available at [http://www.euro.who.int/data/assets/pdf\\_file/0003/78069/E93670.pdf](http://www.euro.who.int/data/assets/pdf_file/0003/78069/E93670.pdf) and can be accessed also through the WHO environmental inequality website with many other documents on environmental inequalities at <http://www.euro.who.int/en/what-we-do/health-topics/environmental-health/social-inequalities-in-environment-and-health>.

#### **Indoor Air Quality Guidelines on dampness and mould**

A detailed **German summary** of the WHO Indoor Air Quality Guidelines on dampness and mould has been published by the Committee on Housing and Health of the Society of Hygiene, Environmental and Public Health Sciences. Please find the German summary at <http://www.med.uni-giessen.de/ghup/wohnmedizin/Publikationen/WHO%20Guidelines%20Feuchtigkeit%20und%20Schimmelpilze.pdf>. The **official executive summaries** of the WHO guidelines are available in English, French, German and Russian at <http://www.euro.who.int/en/what-we-do/health-topics/environmental-health/air-quality/publications/2009/who-guidelines-for-indoor-air-quality-dampness-and-mould.-executive-summary>.

The WHO Indoor Air Quality Guidelines on selected pollutants and chemicals have been produced in 2009 and early 2010 and are expected to be published in fall 2010.

#### **Collaboration with WHO HQ on healthy building issues**

The European Centre for Environment and Health (Bonn Office) and its programme on housing and living environments will collaborate with WHO Headquarter to develop policy and technical guidance on healthy housing in the coming years. A first meeting is planned for fall 2010 to address the health aspects of climate change and the ongoing mitigation and adaptation activities in the housing and building sector. Further issues will be addressed in 2011 and 2012, potentially developing a set of healthy housing guidelines.

#### **Collaboration with CIB on Healthy Buildings**

At a recent conference in Salford (UK), WHO and the CIB (International Council for Research and Innovation in Building and Construction) established an official collaboration and launched a CIB task group (TG77) on Health and the Built Environment. The objective of the TG is to address building-related health issues and provide information and advise to construction industry and building research agencies for integrating health aspects in their work. Further details can be taken from the CIB website (go to <http://cibworld.xs4all.nl/fmi/iwp/cgi?-db=Commission&-loadframes> and search for "TG77" under Commission number).

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