Baden-Württemberg
LANDESGESUNDHEITSAMT BADEN-WÜRTTEMBERG
IM REGIERUNGSPRÄSIDIUM STUTTGART

Newsletter

WHO Collaborating Centre for Housing and Health
Baden-Württemberg State Health Office

LGA Landes Gesundheits Amt Baden-Württemberg

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Editorial

Physical Activity and Health

Physical activity and resilience are the two keywords that characterize the new form of comprehension of health and development in children (Zimmer, 2011, p. 36). Physical and motor activity are able to strengthen physical, personal and social health resources and the potential of people (salutogenetic perspective) (Zimmer 2010, p. 56).

Physical resources for children and adolescents based on physical activity include increased physical fitness, reduced body fatness, favourable cardiovascular and metabolic disease risk profiles and enhanced bone health (i.a. Janssen & Leblanc, 2010; Physical Activity Guidelines Advisory Committee (PAGAC), 2008).

In adults and elder people both moderate and vigorous activity provide equal health benefits. There is strong evidence that physically active individuals have lower rates of all-cause mortality, coronary heart disease, high blood pressure, stroke, diabetes, metabolic syndrome, colon cancer, breast cancer, and depression. Active adults have a healthier body mass and constitution, and a biomarker profile that is more favourable for preventing cardiovascular disease and type 2 diabetes and for enhancing bone health (WHO, 2009). It could additionally be shown that adults aged 65 and above which are physically active present higher levels of functional health, a lower risk of falling, and better cognitive functions.

The effects of physical activity on personal health resources are a positive self-image, a healthy body concept, self-efficacy and self-control or personal autonomy. The sense of personal control improves health, first, through enhancing health-related behaviors. People with high personal control are more knowledgeable about health and are more likely to initiate preventive behaviors. Second, through enhancing the psychological stability, which is a condition precedent to deal effective with external and internal risk factors (Zimmer, 2011, p. 37).

Social health resources based on physical activity are family assistance and social support. Joint action and common sports encourage the development of social skills. These skills include empathy, tolerance, compromise, flexibility and fairness (Brodtmann, 1997, p. 39).

Physical activity – Lifestyle

Reliable longitudinal studies have shown that physical activity tracks from childhood and adolescence to adulthood (Telama et al., 2005). Physical activity and sport are so much part of the lifestyle of the majority of young people that one can speak about the ‘sportization’ of young people’s lives (Baur, 2004).

For this reason all children and adolescents should be physically active daily as part of play, games, sports, transportation, recreation,

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physical education, or planned exercise, in the context of family, school, and community activities (WHO, 2009).

Physical activity - recommendations

The WHO developed evidence-based national guidelines on physical activity for health, reacting on the Resolution to Prevent and Control Noncommunicable Diseases, which is endorsed by the 61st World Health Assembly (WHO, 2008; 2009).

For children and young people, physical activity comprises play, games, sports, transportation, recreation, physical education, or planned exercise, in the context of family, school and community activities. They should accumulate at least 60 minutes of moderate to vigorous physical activity daily (WHO, 2009).

For adults, physical activity includes recreational or leisure-time physical activity, transportation (walking or cycling), occupational (work), household chores, playing games, sports or planned exercise, in the context of daily, family, and community activities. They should do at least 150 minutes of moderate aerobic physical activity throughout the week, or do at least 75 minutes of vigorous aerobic physical activity throughout the week, or an equivalent combination of moderate and vigorous activity. Aerobic activity and muscle-strengthening activities should be included (WHO, 2009).

Physical activity - promotion

Consistent influences on physical activity patterns among adults and young people include confidence in one's ability to engage in regular physical activity, enjoyment of physical activity, support from others, positive beliefs concerning the benefits of physical activity, and lack of perceived barriers of being physically active. (U.S. Department of Health and Human Services, 1996)

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Janssen, I., Leblanc, A. (2010). Systematic Review of the Health Benefits of Physical Activity in School-Aged Children and Youth. *International Journal of Behavioural Nutrition and Physical Activity*, 7 (40).

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Zimmer, R. (2011*). Handbuch der Psychomotorik. Theorie und Praxis der psychomotorischen Förderung von Kindern* (6. Aufl.). Freiburg: Herder.

Quantifying environmental opportunities for physical activity in children: A pilot application.

Christoph Buck, Prof. Dr. Iris Pigeot, Bremen Institute of Prevention Research and Social Medicine, Bremen, Germany. Email: buck@bips.uni-bremen.de;

Physical activity (PA) of children is mainly influenced by individual factors, although the built environment, especially the transport system and the recreational infrastructure, may additionally influence PA levels in children [1]. However, we have to face some methodological challenges: (1) When investigating the impact of the built environment on the PA of residents it has to be distinguished whether the environment has been assessed by subjective measurements as e.g. resulting from questionnaires or by objective measurements based on geographic information systems (GIS) [1]. (2) Most studies of the physical environment are conducted in the US and Australia with focus on the environmental influence on PA in adults, but rarely in Europe [1]. (3) Children do behave completely different compared to adults which requires a modified approach to capture the influence of the built environment on this PA.

In the IDEFICS (Identification and prevention of dietary- and lifestyle-induced health effects in children and infants) study [2], we investigated the impact of opportunities for PA in the built environment of children on PA levels in Northern Germany. For this purpose, we applied a GIS-based approach to quantify urban forms [3]. We adapted the concept of the so-called walkability index introduced by Frank et al. [4] which is based on intersections to describe the street connectivity, as well as land use and the number of residents to assess the level of urbanity. It could be seen that this index was a good positive predictor of objectively measured PA in adults [4].
To make this index more appropriate for children, we included more detailed information on the street connectivity, i.e. on sidewalks, bikeways, and public transit stations, since these urban forms are known to be positive determinants of active travel in youth [5]. We also considered recreational facilities like playgrounds, sport facilities, and green spaces that offer opportunities for PA in leisure time and influence PA levels of children [1]. We digitalized these urban forms in Delmenhorst, the German intervention region of the IDEFICS study [2], using ArcGIS 9.3 (see Figure 1).

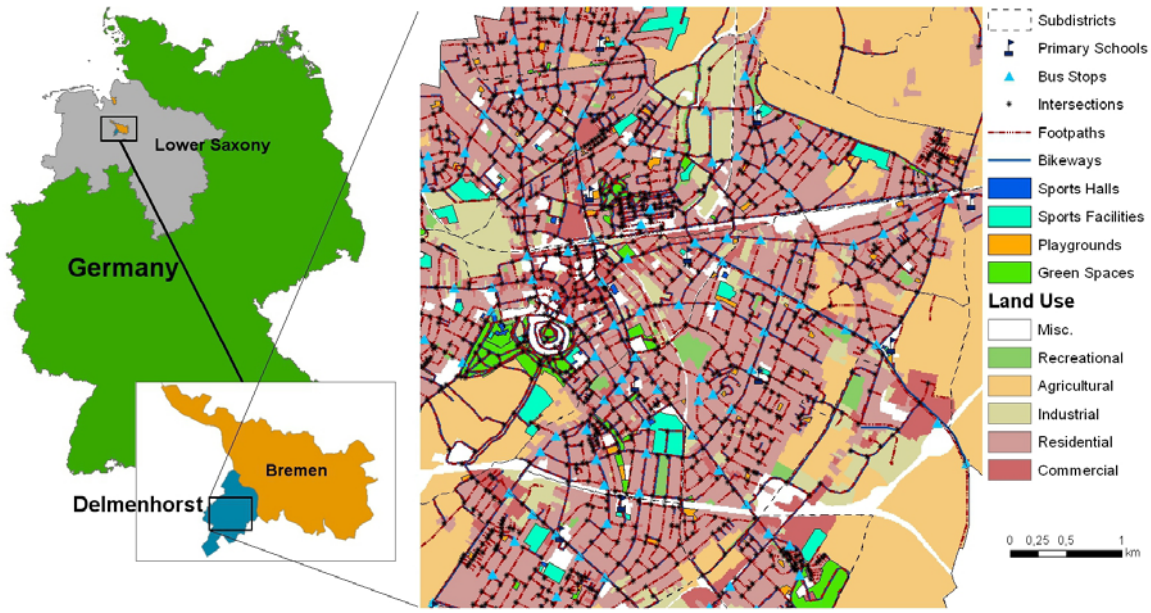

Figure 1: Digitalization of urban forms in the study region Delmenhorst, Lower Saxony.

To measure the level of urbanity, we calculated the land use mix and the residential density [4]. The availability of all other urban forms was quantified using the kernel density method [6]. We combined z-score-standardized means of the cell-based measures of urban form to build urban form features from which we eventually derived the moveability index per school catchment area (see Figure 2) [3].

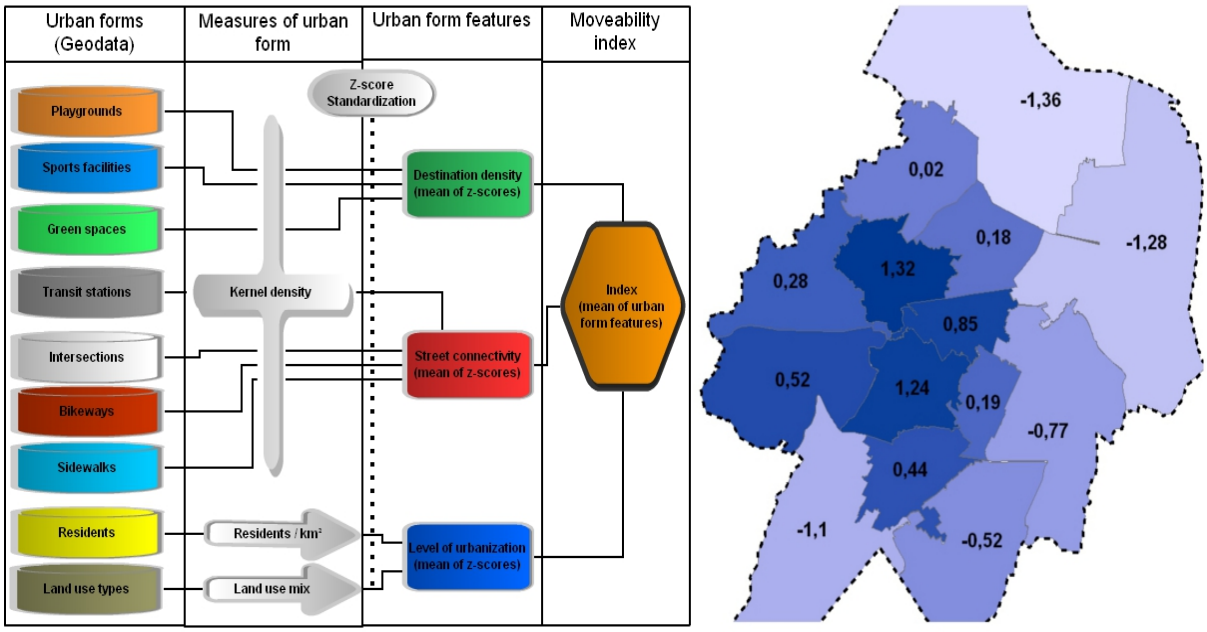

Figure 2: Concept of quantifying urban forms and combining measures to a moveability index as well as the resulting index values per school catchment area in the study area Delmenhorst.

Urban form features and the moveability index were linked with the PA data of 596 school children. Multilevel lognormal regression models were used to investigate the effect of the moveability index on PA levels in these children [2]. Results of the adjusted models showed a small but significant effect of the moveability index on the reported PA in children (β = 0.16, p=0.038). The same effect on reported PA was found using only destination density as environmental variable (β = 0.17, p=0.023). With regard to travel mode, a shorter distance was a significant predictor of walking to school (Odds ratio (OR) = 0.17, 95% Confidence Interval (CI) = [0.12, 0.24]), whereas a longer distance implied cycling to school (OR = 1.56, 95% CI = [1.18, 2.04]) [3].
From our analyses it became obvious that the index has to be improved further to enable it to also capture qualitative aspects of urban forms. The use of specific urban forms like destinations has to be discussed, since the destination density showed the same impact on PA as the moveability index. Moreover, individual pedestrian catchment areas will be implemented to derive the index on a small-scaled level [4]. The final index will be evaluated using IDEFICS data of three participating countries in Europe, namely Germany, Italy, and Sweden [2].

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The Düsseldorf Model for the Promotion of Physical Activity, Sport and Talent

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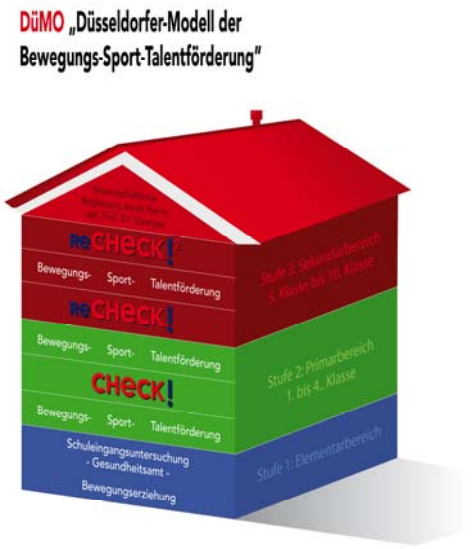
In 2002, the Sports Department of the State Capital Düsseldorf conceived the "Düsseldorf Model for the Promotion of Physical Activity, Sport and Talent" (DüMo) – a unique initiative in Germany for the promotion of sport and motor skills among children and teenagers. The Düsseldorf Model consists of three stages, each with a maximum of three special development areas. The three stages are elementary (kindergarten age group), primary (years 1 – 4) and secondary (years 5 – 10). The development areas are the promotion of physical activity (promoting "the basics" at the elementary stage and targeting children and teenagers with motor deficits), the promotion of sport ("basic training" at the primary stage and for children and teenagers with "normal" sporting ability) and the fostering of talent (for children and teenagers who have particularly good motor skills). Depending on age group and specific development area, practical application of the model varies with regard to the fields of activity "Kindergarten/School", "Club" and "Non-organised leisure time". For each stage, there is a monitoring mechanism (e.g. Check!) which shows whether the measures introduced have "borne fruit". Further information on the testing procedure (Bös et al., 2001) plus an evaluation module can be found under www.check-duesseldorf.de.



Implemented measures (initiated by the Sports Department and its partners at stages 1 to 3)

Physical education: Recognised "Bewegungskindergärten" (kindergartens which place particular emphasis on sport as a pedagogical tool) and child-friendly sports clubs (certification by the Landessportbund Nordrhein Westfalen (Sports Federation of the State of North-Rhine Westphalia – LSB NRW); further training and seminars for pre-school teachers in collaboration with the StadtSportBund (Municipal Sports Federation) Düsseldorf and the Jugendamt (Youth Welfare Office) of the State Capital Düsseldorf; swimming programme for day care centres (KiTa) (in cooperation with the Bädergesellschaft Düsseldorf mbH (responsible for public swimming facilities)
Promotion of physical activity: Free annual courses to promote physical activity for approx. 200 children, run by specially qualified personnel; linking of courses to the extended half-day schools (offene Ganztagsschule) is currently under way; expansion of the courses to secondary schools; targeted invitation of children to courses in sports clubs (e.g. the "Schwermobil" project run by the LSB NRW)
Promotion of sport: Annual sports information fair, "Kids in Action", for all Check! and ReCheck! children
Talent scouting: Bringing gifted children spotted at school entry examinations to the major training centres; annual "Talentiade" competition with approx. 200 Check! children participating; establishment

of a talent centre for the City of Düsseldorf under the guidance of athletica; annual "Talent Day" for the best ReCheck! children
Fostering of talent: NRW Sports Schools, athletica Sport Boarding School and the High-Performance Sport Service Centre, Düsseldorf Schools for High-Performance Sport plus the High-Performance Sport Masterplan

Central measures

1 = Speed (10 m sprint with light barrier) 2 – 3 = Coordination (ball-legs-wall exercise & obstacle race) 4 – 6 = Strength (throwing a medicine ball, standing long jump & sit-ups) 7 = Agility (deep forward bend) 8 = Endurance (6 min run)

Principal results and successes of DüMo

- Bewegungs-KiTas in Düsseldorf: At the beginning, none, today there are 13.
- Further training of female pre-school teachers: To date, over 200 female pre-school teachers have received additional training from the StadtSportBund in physical education in Düsseldorf, reaching many KiTas in the process.
- KiTa swimming: To date, 32 groups have been set up.
- The annual tests and direct feedback of results to parents and teachers have generated increased awareness of the subject of sport and physical activity (cf. Stemper et al., 2008).
- Increase in membership numbers of Düsseldorf sports clubs among young people since the start of DüMo: 2003 = 32,701 to 2009 = 36,442. Increase of 11.4 %.
- No deterioration in age-related motor capabilities between Check! and ReCheck!. In some cases, in fact, an improvement was recorded, particularly in those who scored poorly in the Check!
- Positive results in the areas of overweight and obesity (see below for more details).
- Increased interest in and heightened awareness of the subjects of high-performance sport/fostering of talent, thanks to the "Talentiade" and "Day of Talent" events, with positive effects on high-performance sport in Düsseldorf.

The successes of the Düsseldorf Model are described in the following, taking the Check! criterion "overweight" as an example:

Positive effect on the prevalence of overweight and obesity among second-year pupils in Düsseldorf as seen over an eight-year period (2003 to 2010)
Academic advisor: Prof. Theodor Stemper

Methods

Since 2003, data, such as body weight and height (cm), have been recorded as part of the "Check!" test, carried out annually among second-year pupils under the guidance of the Sports Department of the State Capital Düsseldorf. Participants in the study are all second-year pupils (average age 8.33 ± 0.67 years) between 2003 and 2010 in Düsseldorf (evaluable cases = 29,586, m = 15,055; f = 14,531). Classification as "overweight" (>90th to 97th percentile) and "obese" (>97th percentile) is performed according to the BMI value (kg/m²) in accordance with the reference values recommended by the AGA in 2001 (percentile curves according to Kromeyer-Hauschild et al., 2001).

Results

Taken over the entire test period between 2003 and 2010, the BMI evaluations for Düsseldorf lay on average above the AGA (Study Group for Obesity among Children and Adolescents) reference values for Germany (total 10 %; 7 % overweight and 3 % obese) and also above the values recorded in the recent KiGGS (German Health Interview and Examination Survey for Children and Adolescents, 15 %). In contrast to the cited literature, the prevalence of overweight and obesity from 2003 to 2007 did not increase further, but fell slightly (cf. also Stemper & Janzen, 2006). Since 2008, a considerable decline has been recorded, to 15.1 % now *(Fig. 1)*. As the current analysis shows, the trend was sustained in 2009 and 2010. The secular trend for all eight survey periods therefore indicates an improvement in results, in particular since 2008. This change over the years is far more marked among boys, namely -6.7 % (21.3 % to 14.6 %) than among girls, that is -2.5 % (18.0 % to 15.5 %). Hence, values for the two sexes are converging. On closer examination of prevalence according to the need for action on a socio-spatial level *(Fig.2)* it is apparent that the decline has taken place predominantly (as yet) in social environments with a lower need for action. Therefore, the "social gradient" – evidence of which is also to be found in motor skills testing – is to be considered more closely in future.

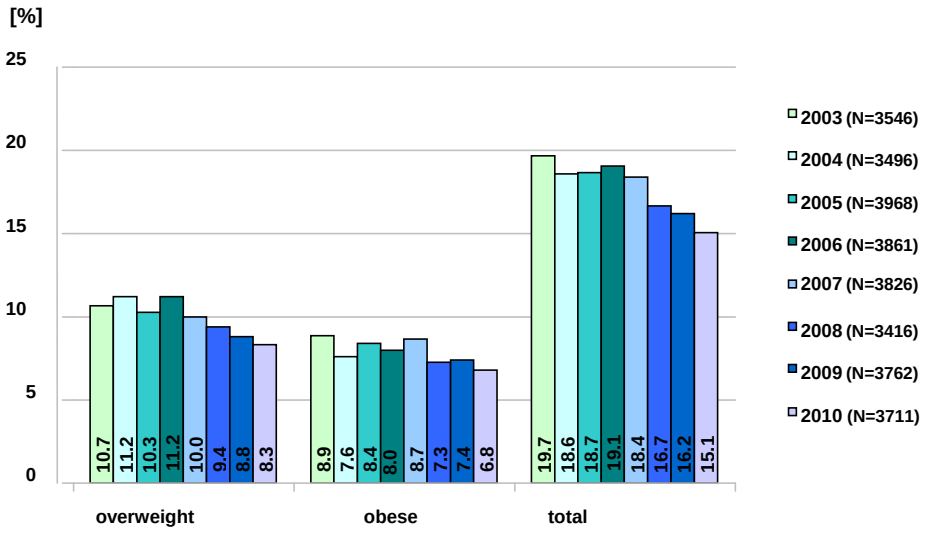


Fig. 1: Prevalence of overweight and obesity in second-year pupils, 2003 – 2010

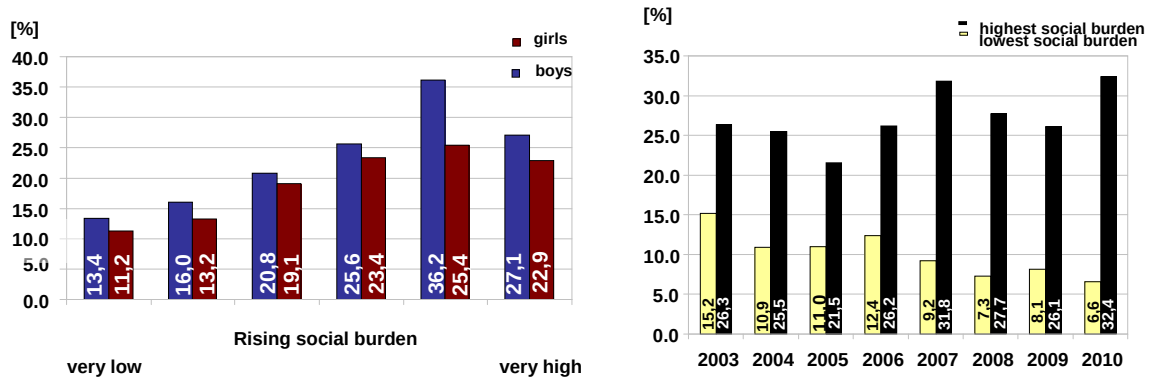


Fig. 2: Prevalence of overweight and obesity in second-year pupils in relation to social burden, 2003 – 2010

Discussion

The data clearly indicate that the quoted secular trend towards a deterioration in BMI values for Düsseldorf cannot be observed. The same now also applies to the neighbouring towns of Hilden, Ratingen and Dormagen, where the Check! has also been introduced. Alongside a general heightened awareness of this topic, the improvement can also be attributed to the many local promotional activities initiated by the Düsseldorf Model.

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Kromeyer- Hauschild, K., et al. (2001). Perzentile für den Body-Mass-Index für das Kindes- und Jugendalter unter Heranziehung verschiedener deutscher Stichproben [Electronic version]. *Monatsschrift Kinderheilkunde, 149* (8), 807 - 818.

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Publications and Resources

Inadequate housing causes more than 100 000 annual deaths in Europe

Inadequate housing accounts for over 100 000 deaths per year in the WHO European Region and causes, or contributes to, many preventable diseases and injuries, including respiratory, nervous system and cardiovascular diseases and cancer. This is the main conclusion of a report, *Environmental burden of disease associated with inadequate housing.* For the first time, this quantitatively-based report addresses many of the risk factors associated with housing – such as noise, damp, indoor air quality, cold and home safety – and provides guidance on how to quantify the health effects of inadequate housing for selected risk factors. The lack of home-safety measures such as smoke detectors is associated with 0.9 deaths per 100 000 population annually, equivalent to more than 7000 entirely preventable deaths each year across the region. People die of cold at home: low indoor temperatures cause 12.8 deaths per 100 000 population per year; and exposure to radon causes 2–3 deaths per 100 000 population for selected countries. Exposure to second-hand smoke causes 7.3 deaths per 100 000 population; and the use of solid fuels as a household energy source without proper ventilation is associated with 16.7 deaths per 100 000 children and 1.1 deaths per 100 000 adults annually. Please see *WHO/Europe's website on housing and health* for further information.

Guidelines for Indoor Air Hygiene in School Buildings in Germany

In the last years, many German schools have been renovated because of suspected asbestos, PCB or other indoor air pollutants. However, there are still many schools which need to go through renovation on account of inadequate building maintenance. To meet the Energy conservation Regulation in Germany introduced in 2002 and amended in 2007, new challenges came into play. As a consequence, the buildings became almost airtight and therefore ventilation became a bigger issue to maintain the indoor air quality. In 2000, the German Federal Environment Agency (UBA) published the first version of the 'Guidelines for Indoor Air Hygiene in School Buildings' to draw attention of teachers, school staff, parents and pupils to the air hygiene problems and the importance of cleaning in schools. This version was updated in 2008 to adjust the guidelines to new challenges such as the problems due to fine and ultra-fine particles, carbon dioxide or the necessity of renovating the buildings to meet the new energy efficiency standards. The guidelines refer primarily to class rooms and recreation rooms in schools in which children regularly have classes as well as child care facilities. Many rec-

ommendations contained in these guidelines are also valid for indoor spaces in other public buildings. An English version of the guidelines is available now online or can be ordered directly and free of costs from the German Federal Environment Agency. For more information, please contact Heinz-Jörn Moriske (*heinz-joern.moriske@uba.de*) or Marcia Giacomini (*marcia.giacomini@uba.de*).

Climate change: protecting health during heat-waves

Every year many people, particularly the elderly, are badly affected by heat. It can trigger exhaustion, heart attacks or confusion and can make existing conditions such as cardiovascular or respiratory diseases worse. Heat-waves of long duration and high intensity have the highest impact on mortality. In nine European cities analyzed by the WHO/Europe's EuroHEAT project (Athens, Barcelona, Budapest, London, Milan, Munich, Paris, Rome and Valencia), the estimated increase in mortality during heat-waves ranged from 7.6% to 33.6%. The impact of prolonged heat-waves (more than four days) was 1.5–5 times that of short ones. The combined effect of heat-waves and of peaks of ozone or PM10 (particulate matter with diameter under 10 µm) air pollution increases mortality, particularly among elderly people (those aged 75–84 years). The mortality increase due to the combined effect of heat and air pollution can be reduced by decreasing exposure to PM10 and ozone on hot days.
Heat-waves are projected to increase due to climate change, but their health effects are largely preventable. WHO/Europe's information package with public health advice on heat-waves for the general public, medical professionals and health services has just been revised. Updates and additions address working environments and additional extreme events, such as vegetation fires. The package is part of a wider portfolio on prevention, from health system preparedness coordinated with meteorological early warning systems, to timely public and medical advice and improvements to housing and urban planning. These actions can be integrated into a *heat–health action plan*.

Electromagnetic fields and public health: mobile phones

The electromagnetic fields produced by mobile phones are classified by the International Agency for Research on Cancer as possibly carcinogenic to humans. Studies are ongoing to more fully assess potential long-term effects of mobile phone use. Read the updated *fact sheet* on the subject that has just been released by WHO.

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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!

Table of Topics

Allergies and Respiratory Diseases

The indoor environment and its effects on childhood asthma.
Ahluwalia SK, Matsui EC.
Curr Opin Allergy Clin Immunol. 2011 Apr;11(2):137-43. *Review*.

An air filter intervention study of endothelial function among healthy adults in a woodsmoke-impacted community.
Allen RW, Carlsten C, Karlen B, Leckie S, van Eeden S, Vedal S, Wong I, Brauer M.
Am J Respir Crit Care Med. 2011 May 1;183(9):1222-30.

Effects of distance from a heavily transited avenue on asthma and atopy in a periurban shantytown in Lima, Peru.
Baumann LM, Robinson CL, Combe JM, Gomez A, Romero K, Gilman RH, Cabrera L, Hansel NN, Wise RA, Breysse PN, Barnes K, Hernandez JE, Checkley W.
J Allergy Clin Immunol. 2011 Apr;127(4):875-82.

Environmental risk factors in the first year of life and childhood asthma in the Central South of Chile.
Boneberger A, Haider D, Baer J, Kausel L, Von Kries R, Kabesch M, Radon K, Calvo M.
J Asthma. 2011 Jun;48(5):464-9.

Combined exposure to dog and indoor pollution: incident asthma in a high-risk birth cohort.
Carlsten C, Brauer M, Dimich-Ward H, Dybuncio A, Becker AB, Chan-Yeung M.
Eur Respir J. 2011 Feb;37(2):324-30.

Feather bedding and childhood asthma associated with house dust mite sensitisation: a randomised controlled trial.
Glasgow NJ, Ponsonby AL, Kemp A, Tovey E, van Asperen P, McKay K, Forbes S.
Arch Dis Child. 2011 Jun;96(6):541-7. *Free Article*.

Healthy Homes University: a home-based environmental intervention and education program for families with pediatric asthma in Michigan.
Largo TW, Borgialli M, Wisinski CL, Wahl RL, Priem WF.
Public Health Rep. 2011 May-Jun;126 Suppl 1:14-26.

The Home Environment of Japanese Female University Students - Association with Respiratory Health and Allergy.
Takaoka M, Norback D.
Indoor and Built Environment. 2011 Jun;20:369-376.

Particulate matter-induced health effects: who is susceptible?
Sacks JD, Stanek LW, Luben TJ, Johns DO, Buckley BJ, Brown JS, Ross M.
Environ Health Perspect. 2011 Apr;119(4):446-54. *Review*.

Relationships among environmental exposures, cord blood cytokine responses, allergy, and wheeze at 1 year of age in an inner-city birth cohort (Urban Environment and Childhood Asthma study).
Wood RA, Bloomberg GR, Kattan M, Conroy K, Sandel MT, Dresen A, Gergen PJ, Gold DR, Schwarz JC, Visness CM, Gern JE.
J Allergy Clin Immunol. 2011 Apr;127(4):913-9.e1-6.

Indoor allergen levels in Guangzhou city, southern China.
Zhang C, Gjesing B, Lai X, Li J, Spangfort MD, Zhong N.
Allergy. 2011 Feb;66(2):186-91.

Indoor Air

"Novel" brominated flame retardants in Belgian and UK indoor dust: implications for human exposure.
Ali N, Harrad S, Goosey E, Neels H, Covaci A.
Chemosphere. 2011 May;83(10):1360-5.

Evaluation of surface lead migration in pre-1950 homes: an on-site hand-held X-ray fluorescence spectroscopy study.
Balasubramanian V, Spear TM, Hart JF, Larson JD.
J Environ Health. 2011 Jun;73(10):14-9.

Ultrafine particle concentrations and exposures in seven residences in northern California.
Bhangar S, Mullen NA, Hering SV, Kreisberg NM, Nazaroff WW.
Indoor Air. 2011 Apr;21(2):132-44.

Quantitative assessments of indoor air pollution and respiratory health in a population-based sample of French dwellings.
Billionnet C, Gay E, Kirchner S, Leynaert B, Annesi-Maesano I.
Environ Res. 2011 Apr;111(3):425-34.

Indoor and outdoor sources of size-resolved mass concentration of particulate matter in a school gym-implications for exposure of exercising children.
Braniš M, Safránek J, Hytychová A.
Environ Sci Pollut Res Int. 2011 May;18(4):598-609.

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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!

6. Deutscher Allergie Kongress
Date: September 8-10, 2011
Venue: Wiesbaden, Germany
Further Information: Deutscher Allergiekongress

Fachtagung für Biogene Schadstoffe und Gesundheit
Date: September 12 -16, 2011
Venue: Berlin, Germany
Further Information: FACHTAGUNG FÜR BIOGENE SCHADSTOFFE UND GESUNDHEIT

23rd International ISEE conference
Date: September 13- 16, 2011
Venue: Barcelona, Spain
Further Information: 23th Congress of the ISEE

PROMOTING HEALTHY COMMUNITIES
Developing and Exploring Linkages Between Public Health Indicators, Exposure and Hazard Data
Date: September 26-27, 2011
Venue: Washington, USA
Further Information: PROMOTING HEALTHY COMMUNITIES

Air Pollution 2011
19th Conference on Modelling, Monitoring and Management of Air Pollution
Date: September 19-21, 2011
Venue: Malta
Further Information: Air Pollution 2011 | 11 Conferences

Conference "The Health and Security Perspectives of Climate Change - How to secure our future wellbeing"
Date: October 17, 2011
Venue: London, United Kingdom
Further Information: The Health and Security Perspectives of Climate Change

Air Quality Eight
Date: October 24-27, 2011
Venue: Arlington, Virginia, USA
Further Information: Air Quality VIII

19th International Congress of Biometeorology
Date: December 5-9, 2011
Venue: Auckland, New Zealand
Further Information: ICB 2011

Air Quality 2012
8th International Conference on Air Quality – Science and Application
Date: March 19-23, 2012
Venue: Athens, Greece
Further Information: Air Quality 2012

IFEH 12th World Congress on Environmental Health
"New Technologies, Healthy Human Being and Environment"
Date: May 22-27, 2012
Venue: Vilnius, Lithuania
Further Information: WELCOME - 12th World Congress on Environmental Health

Healthy Buildings 2012
10th International Congress
Date: July 8 -12, 2012
Venue: Brisbane, Australia
Further Information: Healthy Buildings 2012 — ISIAQ

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

Environmental burden of disease associated with inadequate housing: more than 100 000 annual deaths in Europe

Inadequate housing accounts for over 100 000 deaths per year in the WHO European Region and causes or contributes to many preventable diseases and injuries, including respiratory, nervous system and cardiovascular diseases and cancer. This is the main conclusion of a report, "Environmental burden of disease associated with inadequate housing" released by WHO/Europe.

For the first time, this quantitative report addresses in one document many of the risk factors associated with housing – such as noise, damp, indoor air quality, cold and home safety – each chapter presenting statistical analysis based on sound data and scientific evidence. The report estimates the environmental burden of disease caused by inadequate housing for 11 housing hazards, indicating that poor housing is strongly linked with mortality and disease.

In most societies in the European Region, people spend about 90% of their time in built and artificial environments. Ensuring that the housing stock is as safe and healthy as possible will therefore provide great benefits to public health and society generally and contribute to primary prevention efforts to reduce noncommunicable diseases.

The findings of the report will inform policy-makers at the local, national and global levels and those responsible for setting health-based housing standards and requirements. In addition, the report is relevant for those involved in housing, health and allied fields, including those who design, build, renovate, maintain, finance and otherwise deal with and improve both new and existing housing. For researchers and other academics, this report encourages the collection of relevant data on these and other potential housing-related health risks, providing greater understanding of the health burden that can be attributed to inadequate housing.

The full report providing the evidence compiled for the individual assessments is available on the WHO/Europe web site at http://www.euro.who.int/__data/assets/pdf_file/0003/142077/e95004.pdf along with a summary report presenting the key findings and policy implications at http://www.euro.who.int/__data/assets/pdf_file/0017/145511/e95004sum.pdf.pdf

Housing and health in relation to climate change mitigation

Many strategies to reduce climate change have large, immediate health benefits. Others may pose health risks or tradeoffs. Examined systematically, a powerful new dimension of measures to address climate change emerges. WHO's *Health in the Green Economy* series is reviewing the evidence about expected health impacts of greenhouse gas mitigation strategies in light of mitigations options for key economic sectors such as housing, transport, household energy and the health sector which are considered in the work towards the *Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007* (IPCC).

The full report, identifying expected health impacts from policies to mitigate climate change in the housing sector, is now available at http://www.who.int/hia/hgehousing.pdf
The policy brief on housing can be accessed at http://www.who.int/hia/hgebrief_housing.pdf

WHO plan for burn prevention and care published

Burns are a serious health problem globally. Every year more than 300 000 people die from fires alone. More are killed by burns caused by hot liquids, electricity and chemicals. In addition, millions of people are disabled and disfigured by severe burns. In high-income countries, considerable progress has been made in lowering rates of burn death by proven prevention efforts. However, most of these advances in prevention and care have been minimally applied in low- and middle-income countries, where the vast majority (95%) of burn deaths occur. The plan outlines what WHO would like to promote in terms of: advocacy, policy, data and measurement, research, prevention, health-care services for victims and capacity building.

The WHO plan is accessible at http://whqlibdoc.who.int/publications/2008/9789241596299_eng.pdf and an overview of success stories and lessons learned can be found at http://whqlibdoc.who.int/publications/2011/9789241501187_eng.pdf.

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