



Baden-Württemberg

LANDESGESUNDHEITSAMT BADEN-WÜRTTEMBERG
IM REGIERUNGSPRÄSIDIUM STUTT GART



Newsletter

WHO Collaborating Centre for Housing and Health

Baden-Württemberg State Health Office



No. 21, December 14

Editorial

Dear Readers,

On September 22, 2014 the World Health Organization (WHO) redesignated the State Health Office Baden-Württemberg (Landesgesundheitsamt = LGA) as a Collaborating Centre for Housing and Health for the next four years.

“WHO collaborating centres are institutions such as research institutes, parts of universities or academies, which are designated by the Director-General to carry out activities in support of the Organization's programmes. Currently there are over 700 WHO collaborating centres in over 80 Member States working with WHO on areas such as nursing, occupational health, communicable diseases, nutrition, mental health, chronic diseases and health technologies.

The first institution designated was the Department of Biological Standardization at Statens Serum Institut in Copenhagen in 1948.” (<http://www.who.int/collaboratingcentres/en/>).

The main tasks of our WHO Centre for Housing and Health are:

1. To contribute to WHO's work in the monitoring of trends and changes of housing conditions and their possible health risks for and effects on residents and specifically vulnerable groups;
2. To assist WHO activities against damp and mould by establishing quality standards for measurement, identification and evaluation of indoor moulds and building capacities in laboratory diagnosis;

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3. To support WHO projects in compilation and dissemination of housing and health information to the public, to scientific experts, and to policy-makers.

In this context, editing and compilation of evidence on housing and health risks and dissemination via electronic newsletters, gives an overview of housing and health-relevant and recently published scientific articles.

We intend to publish two types of newsletters: thematic newsletters and pure literature reviews:

- 2 full editions with a lead theme, comprising technical contributions, literature collection, information on WHO activities (message board) and event calendar,
- 2 editions comprising literature collection and event calendar.

For our German readers, we also intend to facilitate reading of the newsletter by occasional German translations.

Additionally, the newsletters will be published on our website (<http://www.gesundheitsamt-bw.de/MLS/EN/WHOCC/Seiten/default.aspx>) to be downloaded as pdf.

We hope that our further newsletters will

- enable people to share news, events and experiences related to the subject of Housing and Health,
- provide a significant contribution to the strengthening of the interdisciplinary exchange and cooperation in the housing and health issue,
- bring closer together the various actors in this field.

In the present newsletter you will find a comprehensive literature collection related to 13 health related housing topics, as well as publications, event announcements and the WHO message board. Pleasant reading!

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Publications and Resources

Nanotechnology in paints & varnishes: Checking hazard to humans and environment

Nanotechnology makes window surfaces stain-resistant and floor sealers more scratch-resistant. Moreover, compared with conventional technologies, coating thicknesses can often be less and the content of solvents can be reduced. However, before the launch of new products, companies should check their products with regard to possible risks to humans and the environment. The more nanoparticles are released through abrasion or weathering, the greater is the risk of harm, for example, to human health or aquatic life. Thus, the coating should be designed in a manner that the nanoparticles are embedded firmly. Consumers should be informed about the opportunities, risks and handling requirements of the products. To date, the manufacturers of the paint and coatings industry are not obliged to label products that contain nanomaterials. For further information please see:

<http://www.umweltbundesamt.de/themen/wirtschaft-konsum/innovative-produktionsverfahren/nanotechnologie> 

Both traffic noise and air pollution linked to stroke

Road traffic noise and air pollution both increase the risk of having a stroke, recent research from Denmark suggests. The results suggest that traffic noise is more strongly associated with ischaemic stroke, whereas only air pollution appears to be linked with more serious, fatal strokes. For further information please see:

http://ec.europa.eu/environment/integration/research/newsalert/pdf/traffic_noise_air_pollution_links_strokes_390na7_en.pdf

Noise can make you sick: New teaching material for schools

Today, noise is practically everywhere and almost always present. As noise is not only an annoyance but can make people sick, children should be made aware about this at an early age. With the brochure of the German Federal Environment Agency (UBA) children can learn a lot about listening and noise. The brochure is intended for primary school teaching. Many small experiments, tasks, puzzles and games make learning about listening and noise exciting. A handout for teachers gives hints and shows the answers to the individual tasks. For further information please see:

http://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/140923_kinder_laerm_web.pdf 

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 .

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Allergies and Respiratory Diseases

[Exposure to house dust phthalates in relation to asthma and allergies in both children and adults.](#)

Ait Bamai Y, Shibata E, Saito I, Araki A, Kanazawa A, Morimoto K, Nakayama K, Tanaka M, Takigawa T, Yoshimura T, Chikara H, Saijo Y, Kishi R.

Sci Total Environ. 2014 Jul 1;485-486:153-63.

[A systematic review of associations between environmental exposures and development of asthma in children aged up to 9 years.](#)

Dick S, Friend A, Dynes K, AlKandari F, Doust E, Cowie H, Ayres JG, Turner SW.

BMJ Open. 2014 Nov 24;4(11):e006554. [Review](#). [Free Article](#).

[Home renovation, family history of atopy, and respiratory symptoms and asthma among children living in China.](#)

Dong GH, Qian ZM, Wang J, Trevathan E, Liu MM, Wang D, Ren WH, Chen W, Simckes M, Zelicoff A.

Am J Public Health. 2014 Oct;104(10):1920-7.

[The role of secondhand smoke in allergic rhinitis: a systematic review.](#)

Hur K, Liang J, Lin SY.

Int Forum Allergy Rhinol. 2014 Feb;4(2):110-6. [Review](#).

[Can overweight/obesity and smoking have combined effects on bronchial hyperresponsiveness?](#)

Juusela M, Pallasaho P, Rönmark E, Sarna S, Sovijärvi A, Lundbäck B.

Eur Respir J. 2014 Feb;43(2):653-4.

[Markers of disease severity and socioeconomic factors in allergic fungal rhinosinusitis.](#)

Miller JD, Deal AM, McKinney KA, McClurg SW, Rodriguez KD, Thorp BD, Senior BA, Zanation AM, Ebert CS Jr.

Int Forum Allergy Rhinol. 2014 Apr;4(4):272-9.

[Indoor environment and respiratory symptoms among children under five years of age in a peri-urban area of Abidjan.](#)

Sackou JK, Oga SA, Tanoh F, Houénou Y, Kouadio L.

Indoor and Built Environment November 2014 23: 988-993.

[Higher energy efficient homes are associated with increased risk of doctor diagnosed asthma in a UK subpopulation.](#)

Sharpe RA, Thornton CR, Nikolaou V, Osborne NJ.

Environ Int. 2014 Dec 9;75C:234-244.

[Can overweight/obesity and smoking have combined effects on bronchial hyperresponsiveness?](#)

Sposato B, Scalese M.

Eur Respir J. 2014 Feb;43(2):651-3.

Indoor Air

[Do 'green' buildings have better indoor environments? New evidence.](#)

Newsham GR, Birt BJ, Arsenault C, Thompson AJL, Jennifer A. Veitch JA, Sandra Mancini S, Galasiu AD, Gover BN, Macdonald IA, Burns GJ.

BRI 2013 Aug;41(4):415-434.

[Levels and profile of several classes of organic contaminants in matched indoor dust and serum samples from occupational settings of Pakistan.](#)

Ali N, Mehdi T, Malik RN, Eqani SA, Kamal A, Dirtu AC, Neels H, Covaci A.

Environ Pollut. 2014 Oct;193:269-76.

[Indoor metallic pollution and children exposure in a mining city.](#)

Barbieri E, Fontúrbel FE, Herbas C, Barbieri FL, Gardon J.

Sci Total Environ. 2014 Jul;487:13-9.

[Semivolatile organic compounds in indoor air and settled dust in 30 French dwellings.](#)

Blanchard O, Gloennec P, Mercier F, Bonvallot N, Chevrier C, Ramalho O, Mandin C, Bot BL.

Environ Sci Technol. 2014 Apr 1;48(7):3959-69.

[Systemic effects of wood smoke in a short-term experimental exposure study of atopic volunteers.](#)

Bønløkke JH, Riddervold IS, Grønborg TK, Skogstrand K, Hougaard DM, Barregard L, Sigsgaard T.

J Occup Environ Med. 2014 Feb;56(2):177-83.

[The effect of source type and source strength on inhaled mass of particulate matter during episodic indoor activities.](#)

Braniš M, Řezáčová P, Lazaridis M.

Indoor and Built Environment December 2014 23: 1106-1116.

[COPD phenotypes in biomass smoke- versus tobacco smoke-exposed Mexican women.](#)

Camp PG, Ramirez-Venegas A, Sansores RH, Alva LF, McDougall JE, Sin DD, Paré PD, Müller NL, Silva CI, Rojas CE, Coxson HO.

Eur Respir J. 2014 Mar;43(3):725-34.

[Occurrence of a broad range of legacy and emerging flame retardants in indoor environments in Norway.](#)

Cequier E, Ionas AC, Covaci A, Marcé RM, Becher G, Thomsen C.

Environ Sci Technol. 2014 Jun 17;48(12):6827-35.

[Indoor air quality in green vs conventional multifamily low-income housing.](#)

Colton MD, MacNaughton P, Vallarino J, Kane J, Bennett-Fripp M, Spengler JD, Adamkiewicz G. Environ Sci Technol. 2014 Jul 15;48(14):7833-41.

[Risk of leukaemia or cancer in the central nervous system among children living in an area with high indoor radon concentrations: results from a cohort study in Norway.](#)

Del Risco Kollerud R, Blaasaas KG, Claussen B. Br J Cancer. 2014 Sep 23;111(7):1413-20.

[Persistent Associations between Maternal Prenatal Exposure to Phthalates on Child IQ at Age 7 Years.](#)

Factor-Litvak P, Insel B, Calafat AM, Liu X, Perera F, Rauh VA, Whyatt RM. PLoS One. 2014 Dec 10;9(12):e114003. **Free Article.**

[Prenatal VOC exposure and redecoration are related to wheezing in early infancy.](#)

Franck U, Weller A, Röder SW, Herberth G, Junge KM, Kohajda T, von Bergen M, Rolle-Kampczyk U, Diez U, Borte M, Lehmann I; LiNA Study Group. Environ Int. 2014 Dec;73:393-401.

[Characterization of indoor air quality and resident health in an Arizona senior housing apartment building.](#)

Frey SE, Destailats H, Cohn S, Ahrentzen S, Fraser MP. J Air Waste Manag Assoc. 2014 Nov;64(11):1251-9.

[Organophosphate flame retardants and plasticizers in the air and dust in German daycare centers and human biomonitoring in visiting children \(LUPE 3\).](#)

Fromme H, Lahrz T, Kraft M, Fembacher L, Mach C, Dietrich S, Burkardt R, Völkel W, Göen T. Environ Int. 2014 Oct;71:158-63.

[Phthalate exposure and risk assessment in California child care facilities.](#)

Gaspar FW, Castorina R, Maddalena RL, Nishioka MG, McKone TE, Bradman A. Environ Sci Technol. 2014 Jul 1;48(13):7593-601.

[Measurement of phthalates in skin wipes: estimating exposure from dermal absorption.](#)

Gong M, Zhang Y, Weschler CJ. Environ Sci Technol. 2014 Jul 1;48(13):7428-35.

[Improve our understanding of semivolatile organic compounds in buildings.](#)

Guo Z. Indoor and Built Environment October 2014 23: 769-773. **Free Article.**

[Erste Entwarnung bei Nanofarben.](#)

Klose, R. Zeitschriftenartikel aus: Applica 2014;121(5):17-18. 

[Allergens and \$\beta\$ -glucans in dutch homes and schools: characterizing airborne levels.](#)

Krop EJ, Jacobs JH, Sander I, Raulf-Heimsoth M, Heederik DJ. PLoS One. 2014 Feb 14;9(2):e88871.

[The impact of drinking water, indoor dust and paint on blood lead levels of children aged 1-5 years in Montréal \(Québec, Canada\).](#)

Levallois P, St-Laurent J, Gauvin D, Courteau M, Prévost M, Campagna C, Lemieux F, Nour S, D'Amour M, Rasmussen PE. J Expo Sci Environ Epidemiol. 2014 Mar-Apr;24(2):185-91.

[Exposures of 129 preschool children to organochlorines, organophosphates, pyrethroids, and acid herbicides at their homes and daycares in North Carolina.](#)

Morgan MK, Wilson NK, Chuang JC. Int J Environ Res Public Health. 2014 Apr 3;11(4):3743-64. **Free Article.**

[A cross-sectional study of determinants of indoor environmental exposures in households with and without chronic exposure to biomass fuel smoke.](#)

Pollard SL, Williams DL, Breyse PN, Baron PA, Grajeda LM, Gilman RH, Miranda JJ, Checkley W; CRONICAS Cohort Study Group.
Environ Health. 2014 Mar 24;13(1):21. [Free Article.](#)

[Brominated flame retardants in matched serum samples from Swedish first-time mothers and their toddlers.](#)

Sahlström LM, Sellström U, de Wit CA, Lignell S, Darnerud PO.
Environ Sci Technol. 2014 Jul 1;48(13):7584-92.

[Quantification of emissions from domestic heating in residential areas of Izmir, Turkey and assessment of the impact on local/regional air-quality.](#)

Sari D, Bayram A.
Sci Total Environ. 2014 Aug 1;488-489:429-36.

[Measurements and modeling of deposited particle transport by foot traffic indoors.](#)

Sippola MR, Sextro RG, Thatcher TL.
Environ Sci Technol. 2014 Apr 1;48(7):3800-7.

[Lüftung punktet in vielen Punkten.](#)

Tappler, P.
Zeitschriftenartikel aus: Gebäude-Energieberater GEB 2014;10(10):16-19. 

[Determination of the emissions of volatile organic compounds from oriented strand boards and evaluation by the German AgBB scheme.](#)

Wilke O, Wiegner K, Scheffer H, Brödner D, Kalus S.
Indoor and Built Environment November 2014 23: 1050-1054.

Emissionsarmes Bauen, gesundes Wohnen.

Wohlgemuth, FJ.
Artikel aus: Wohnmedizin 2014;52(2):90-92. ISSN: 0342-5967.

[Investigation of association between indoor environmental factors and child health problems in Japan – Design of survey and outcome from preliminary cross-sectional questionnaire.](#)

Yoshino H, Ando N, Kensuke H, Hasegawa K, Abe K, Ikeda K, Kato N, Kumagai K, Mitamura T, Yanagi U.
Indoor and Built Environment December 2014 23: 1151-1162.

[Lung function and incidence of chronic obstructive pulmonary disease after improved cooking fuels and kitchen ventilation: a 9-year prospective cohort study.](#)

Zhou Y, Zou Y, Li X, Chen S, Zhao Z, He F, Zou W, Luo Q, Li W, Pan Y, Deng X, Wang X, Qiu R, Liu S, Zheng J, Zhong N, Ran P.
PLoS Med. 2014 Mar 25;11(3):e1001621. [Free Article.](#)

Mould and Dampness

[Next-generation DNA sequencing reveals that low fungal diversity in house dust is associated with childhood asthma development.](#)

Dannemiller KC, Mendell MJ, Macher JM, Kumagai K, Bradman A, Holland N, Harley K, Eskenazi B, Peccia J.
Indoor Air. 2014 Jun;24(3):236-47.

[Extrolites of *Wallemia sebi*, a very common fungus in the built environment.](#)

Desroches TC, McMullin DR, Miller JD.
Indoor Air. 2014 Oct;24(5):533-42.

[Determinants of house dust, endotoxin, and \$\beta\$ -\(1→3\)-d-glucan in homes of Danish children.](#)

Holst G, Høst A, Doekes G, Meyer HW, Madsen AM, Sigsgaard T.
Indoor Air. 2014 Jul 11. [Epub ahead of print]

[Home dampness, childhood asthma, hay fever, and airway symptoms in Shanghai, China: associations, dose-response relationships, and lifestyle's influences.](#)

Hu Y, Liu W, Huang C, Zou ZJ, Zhao ZH, Shen L, Sundell J.
Indoor Air. 2014 Oct;24(5):450-63.

[Fungal secondary metabolites as harmful indoor air contaminants: 10 years on.](#)

Miller JD, McMullin DR.
Appl Microbiol Biotechnol. 2014 Dec;98(24):9953-66.

[Asthma, Allergy and Eczema among Adults in Multifamily Houses in Stockholm \(3-HE Study\) - Associations with Building Characteristics, Home Environment and Energy Use for Heating.](#)

Norbäck D, Lampa E, Engvall K.
PLoS One. 2014 Dec 5;9(12):e112960. *Free Article.*

[Indoor fungal diversity and asthma: A meta-analysis and systematic review of risk factors.](#)

Sharpe RA, Bearman N, Thornton CR, Husk K, Osborne NJ.
J Allergy Clin Immunol. 2014 Aug 23. pii: S0091-6749(14)00952-X.

[Personal and demographic factors and change of subjective indoor air quality reported by school children in relation to exposure at Swedish schools: A 2-year longitudinal study.](#)

Wang J, Smedje G, Nordquist T, Norbäck D.
Sci Total Environ. 2014 Dec 5;508C:288-296.

[Assessing the allergenic potential of molds found in water-damaged homes in a mouse model.](#)

Ward MD, Copeland LB, Lehmann J, Doerfler DL, Vesper SJ.
Inhal Toxicol. 2014 Jul;26(8):474-84.

Light and Radiation

[Hierarchical modeling of indoor radon concentration: how much do geology and building factors matter?](#)

Borgoni R, De Francesco D, De Bartolo D, Tzavidis N.
J Environ Radioact. 2014 Dec;138:227-37.

[Definition of radon prone areas in Friuli Venezia Giulia region, Italy, using geostatistical tools.](#)

Cafaro C, Bossew P, Giovani C, Garavaglia M.
J Environ Radioact. 2014 Dec;138:208-19.

[Risk of leukaemia or cancer in the central nervous system among children living in an area with high indoor radon concentrations: results from a cohort study in Norway.](#)

Del Risco Kollerud R, Blaasaas KG, Claussen B.
Br J Cancer. 2014 Sep 23;111(7):1413-20.

[Nonlinear dose-response relationship between radon exposure and the risk of lung cancer: evidence from a meta-analysis of published observational studies.](#)

Duan P, Quan C, Hu C, Zhang J, Xie F, Hu X, Yu Z, Gao B, Liu Z, Zheng H, Liu C, Wang C, Yu T, Qi S, Fu W, Kourouma A, Yang K.
Eur J Cancer Prev. 2014 Aug 11. [Epub ahead of print]

[Predictive analysis and mapping of indoor radon concentrations in a complex environment using kernel estimation: An application to Switzerland.](#)

Kropat G, Bochud F, Jaboyedoff M, Laedermann JP, Murith C, Palacios Gruson M, Baechler S.
Sci Total Environ. 2015 Feb 1;505:137-48.

[The Spanish indoor radon mapping strategy.](#)

Sainz-Fernandez C, Fernandez-Villar A, Fuente-Merino I, Gutierrez-Villanueva JL, Martin-Matarranz JL, Garcia-Talavera M, Casal-Ordas S, Quindós-Poncela LS.
Radiat Prot Dosimetry. 2014 Nov;162(1-2):58-62.

[Lung cancer in never-smokers: a case-control study in a radon-prone area \(Galicia, Spain\).](#)

Torres-Durán M, Ruano-Ravina A, Parente-Lamelas I, Leiro-Fernández V, Abal-Arca J, Montero-Martínez C, Pena-Álvarez C, González-Barcala FJ, Castro-Añón O, Golpe-Gómez A, Martínez C, Mejuto-Martí MJ, Fernández-Villar A, Barros-Dios JM.
Eur Respir J. 2014 Oct;44(4):994-1001.

[High variability of indoor radon concentrations in uraniumiferous bedrock areas in the Balkan region.](#)

Zunić ZS, Ujić P, Nađđerđ L, Yarmoshenko IV, Radanović SB, Komatina Petrović S, Celiković I, Komatina M, Bossew P.
Appl Radiat Isot. 2014 Dec;94:328-37.

Smoking / Environmental Tobacco Smoke

[Home Exposure to Secondhand Smoke among People Living in Multiunit Housing and Single Family Housing: a Study of California Adults, 2003-2012.](#)

Chambers C, Sung HY, Max W.
J Urban Health. 2014 Dec 3. [Epub ahead of print]

[Exposure to secondhand smoke promotes sympathetic activity and cardiac muscle cachexia.](#)

Flouris AD, Dinas PC, Tzatzarakis MN, Metsios GS, Kostikas K, Jamurtas AZ, Tsatsakis AM, Koutedakis Y.
Int J Environ Health Res. 2014;24(3):189-94.


[WHO Framework Convention on Tobacco Control in China: barriers, challenges and recommendations.](#)

Hu TW, Lee AH, Mao Z.
Glob Health Promot. 2013 Dec;20(4):13-22. [Free Article.](#)

[Prevalence of smokefree home rules--United States, 1992-1993 and 2010-2011.](#)

King BA, Patel R, Babb SD.
MMWR Morb Mortal Wkly Rep. 2014 Sep 5;63(35):765-9. [Free Article.](#)

[\[Passive smoking: 6 years of the Non-smoker Protection Act in Germany and the consequences\].](#)

Pötschke-Langer M.
Radiologe. 2014 Feb;54(2):156-7. 

[Exposure to nitrosamines in thirdhand tobacco smoke increases cancer risk in non-smokers.](#)

Ramírez N, Özel MZ, Lewis AC, Marcé RM, Borrull F, Hamilton JF.
Environ Int. 2014 Oct;71:139-47.

[Factors influencing adoption of and adherence to indoor smoking bans among health disparity communities.](#)

Rees VW, Keske RR, Blaine K, Aronstein D, Gandelman E, Lora V, Savage C, Geller AC.
Am J Public Health. 2014 Oct;104(10):1928-34. [Free Article.](#)

[Active or passive exposure to tobacco smoking and allergic rhinitis, allergic dermatitis, and food allergy in adults and children: a systematic review and meta-analysis.](#)

Saulyte J, Regueira C, Montes-Martínez A, Khudyakov P, Takkouche B.
PLoS Med. 2014 Mar 11;11(3):e1001611. [Free Article.](#)

[Evaluating the implementation process of a citywide smoke-free multiunit housing ordinance: insights from community stakeholders.](#)

Yerger VB, Battle RS, Moore RS.
Am J Public Health. 2014 Oct;104(10):1889-91.

[Battling tobacco use at home: an analysis of smoke-free home rules among U.S. veterans from 2001 to 2011.](#)

Zhang X, Martinez-Donate AP, Cook J, Piper ME, Berg K, Jones NR.
Am J Public Health. 2014 Sep;104 Suppl 4:S572-9. [Free Article.](#)

Housing and Ageing Society

[5 steps to adapt your home as you age. Modifying doorknobs, doorways, and railings now will help you live there longer.](#)

[No authors listed]

Harv Health Lett. 2014 May;39(7):1, 7.

[Neighborhood Support and Aging-in-Place Preference Among Low-Income Elderly Chinese City-Dwellers.](#)

Lum TY, Lou VW, Chen Y, Wong GH, Luo H, Tong TL.

J Gerontol B Psychol Sci Soc Sci. 2014 Nov 10. pii: gbu154. [Epub ahead of print]

[Does smart home technology prevent falls in community-dwelling older adults: a literature review.](#)

Pietrzak E, Cotea C, Pullman S.

Inform Prim Care. 2014;21(3):105-12.

Home Safety

[Reducing unintentional injuries in and around the home among children under five years.](#)

Godson R.

Community Pract. 2014 Aug;87(8):12.

[Home modifications to reduce injuries from falls in the Home Injury Prevention Intervention \(HIPI\) study: a cluster-randomised controlled trial.](#)

Keall MD, Piers N, Howden-Chapman P, Cunningham C, Cunningham M, Guria J, Baker MG.

Lancet. 2014 Sep 22. pii: S0140-6736(14)61006-0. [Epub ahead of print]

[Home-safety modifications to reduce injuries from falls.](#)

Robinovitch SN, Scott V, Feldman F.

Lancet. 2014 Sep 22. [Epub ahead of print]

[Primary prevention of lead poisoning: protecting children from unsafe housing.](#)

Rogers ML, Lucht JA, Sylvaria AJ, Cigna J, Vanderslice R, Vivier PM.

Am J Public Health. 2014 Aug;104(8):e119-24.

[Aging, place, and technology: toward improving access and wellness in older populations.](#)

Satariano WA, Scharlach AE, Lindeman D.

J Aging Health. 2014 Dec;26(8):1373-89.

Housing Conditions

[Using the community readiness model to examine the built and social environment: a case study of the High Point neighborhood, Seattle, Washington, 2000-2010.](#)

Buckner-Brown J, Sharify DT, Blake B, Phillips T, Whitten K.

Prev Chronic Dis. 2014 Nov 6;11:E194.

[Sleep and the Housing and Neighborhood Environment of Urban Latino Adults Living in Low-Income Housing: The AHOME Study.](#)

Chambers EC, Pichardo MS, Rosenbaum E.

Behav Sleep Med. 2014 Nov 11:1-16. [Epub ahead of print]

[Social capital and vulnerable urban youth in five global cities.](#)

Marshall BD, Astone N, Blum RW, Jejeebhoy S, Delany-Moretlwe S, Brahmabhatt H, Olumide A, Wang Z.

J Adolesc Health. 2014 Dec;55(6 Suppl):S21-30. **Free Article.**

[Bats and bacterial pathogens: a review.](#)

Mühldorfer K.

Zoonoses Public Health. 2013 Feb;60(1):93-103. **Review.**

[Making homes more "visitable" for wheelchair users and potential hosts.](#)

Nary DE.

Arch Phys Med Rehabil. 2014 Oct;95(10):1995-6.

[Integrating public health and community development to tackle neighborhood distress and promote well-being.](#)

Pastor M, Morello-Frosch R.

Health Aff (Millwood). 2014 Nov 1;33(11):1890-6.

[Perception of neighborhood environment and health risk behaviors in Prague's teenagers: a pilot study in a post-communist city.](#)

Spilkova J, Dzúrova D, Pitonak M.

Int J Health Geogr. 2014 Oct 14;13:41. *Free Article.*[Developing empirically supported theories of change for housing investment and health.](#)

Thomson H, Thomas S.

Soc Sci Med. 2014 Nov 20;124C:205-214. *Free Article.*[The presence and growth of Legionella species in thermostatic shower mixer taps: an exploratory field study.](#)

van Hoof J, Hornstra LM, van der Blom E, Nuijten OWW, van der Wielen PWJJ.

Building Services Engineering Research and Technology November 2014 35: 600-612.

Housing and Mental Health

[Neighbourhood and own social housing and early problem behaviour trajectories.](#)

Flouri E, Midouhas E, Tzatzaki K.

Soc Psychiatry Psychiatr Epidemiol. 2014 Sep 5. [Epub ahead of print]

[Neighbourhood influences on mental health in master planned estates: a qualitative study of resident perspectives.](#)

Francis J, Giles-Corti B, Wood L, Knuiman M.

Health Promot J Austr. 2014 Dec;25(3):186-92.

[Neighborhood epidemiological monitoring and adult mental health: European Quality of Life Survey, 2007-2012.](#)

Shiue I.

Environ Sci Pollut Res Int. 2014 Nov 14. [Epub ahead of print]

Thermal Comfort / Energy

[Short-term effects of air temperature on mortality and effect modification by air pollution in three cities of Bavaria, Germany: a time-series analysis.](#)

Breitner S, Wolf K, Devlin RB, Diaz-Sanchez D, Peters A, Schneider A.

Sci Total Environ. 2014 Jul 1;485-486:49-61.

[Vulnerability to extreme heat by socio-demographic characteristics and area green space among the elderly in Michigan, 1990-2007.](#)

Gronlund CJ, Berrocal VJ, White-Newsome JL, Conlon KC, O'Neill MS.

Environ Res. 2015 Jan;136:449-61.

[Intra-urban vulnerability to heat-related mortality in New York City, 1997-2006.](#)

Klein Rosenthal J, Kinney PL, Metzger KB.

Health Place. 2014 Nov;30:45-60.

[An approach to evaluate the intra-urban thermal variability in summer using an urban indicator.](#)

Masseti L, Petralli M, Brandani G, Orlandini S.

Environ Pollut. 2014 Sep;192:259-65.

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Events Announcement**BAU 2015 - World's Leading Trade Fair for Architecture, Materials and Systems**

January 19-24, 2015

Munich, Germany

Further Information: [BAU – World's Leading Trade Fair for Architecture, Materials, Systems](#)

ICAPC 2015 - International Conference on Air Pollution and Control

February 23-24, 2015

Paris, France

Further Information: [ICAPC Paris 2015: International Conference on Air Pollution and Control](#)

International Noise Awareness Day

April 29, 2015

Worldwide

Further Information: [Noise awareness day 2015](#)

ASHARE 2015 Annual Conference

June 27- July 1, 2015

Atlanta, USA

Further Information: [Indoor Environment Connections](#)

13th World Allergy Congress 2015

October 14-17, 2015

Seoul, Korea

Further Information: [World Allergy Congress](#)

9th National Housing Conference

October 28-30, 2015

Perth, Australia

Further Information: [NHC - National Housing Conference](#)

2015 Greenbuild International Conference and Expo

November 18-22, 2015

Washington D.C., USA

Further Information: [2015 Greenbuild International Conference and Expo](#)

Nanotechnology based sensors and detection methods - workshop

December 1-2, 2015

Ispra, Italy

Further Information: [Nanotechnology based sensors and detection methods - workshop - JRC Science Hub - European Commission](#)**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, built and urban environments**WHO sets benchmarks to reduce health impacts of indoor air pollution**

A new set of WHO recommendations highlights the dangers of burning fuels like unprocessed coal and kerosene in the home, and sets targets for reducing emissions of health-damaging pollutants from domestic cookstoves, space heaters and fuel-based lamps. WHO Guidelines for indoor air quality: household fuel combustion stresses the need to improve access to cleaner home energy sources – such as liquefied petroleum gas, biogas, natural gas, ethanol and electricity – particularly in low- and middle-income countries. The guidelines build on WHO findings earlier this year that revealed more than one in eight of all annual global deaths are due to indoor or outdoor air pollution exposure. According to the estimates, some 4.3 million people worldwide die every year as a result of household air pollution emitted by rudimentary biomass and coal cookstoves.

[Click here](#) to access the guidelines, a multi-language executive summary and frequently asked questions.

Aligning social and environmental determinants of health

WHO is currently leading various environmental health projects with a strong focus on [social determinants of health and equity](#). Within all countries, certain population sub-groups face a greater risk of exposure to harmful environmental conditions than other people. In order to meaningfully address these conditions, the linkages between environmental exposure and other social determinants of health is critical. Example projects include [WHO Housing and health guidelines](#), currently under development, which will address health and health inequities that result from unhealthy and unsafe housing conditions. The 2014 UN-Water GLAAS report recently highlighted systematic efforts to ensure equitable access to water and sanitation and the critical role of intersectoral action. The forthcoming training manual on *Health in all policies* (HiAP) provides an important resource for intersectoral action. In addition, and recognizing the need for stronger investment in and expansion of these activities, WHO aims to revitalize and strengthen the valuable collaboration with established institutional and stakeholder networks developed in relation to the Commission on Social Determinants of Health.

Human health in areas with industrial contamination

The health impact and the remediation of sites contaminated by industrial activities (e.g. petrochemical, waste treatment, power generation) is an important issue in Europe and a priority for WHO in the environment and health area. Earlier industrialization and poor environmental management practices have left a legacy of over 100 000 contaminated sites across the European Region, many of which

still operate unsafely. Malpractice, lack of legislation, or lack of implementation of legislation, are the causes of contamination. Past and current activities can cause local and diffuse accumulation of environmental stressors to an extent that might threaten human health and the environment, by altering air quality, contaminating soil, and polluting groundwater and surface water. Acknowledging this challenge, the WHO Regional Office for Europe has published a book on "[Human health in areas with industrial contamination](#)" to outline a framework for integrated assessment of the impacts of large industrial activities.

The framework is supported by examples related to the adverse effects on environment and health of petrochemical industries, based on the results of a research project carried out in Sicily, southern Italy, by the WHO Regional Office for Europe. The Sicilian case studies provide examples of methods for estimating the adverse effects on health of petrochemical activities in highly contaminated areas and for developing strategies and tools for integrating health considerations in the formulation of policies and rehabilitation plans.

The book is intended to contribute to the analysis of high-risk areas, by providing a review of the evidence, study design options, legislation, and results on the adverse impacts on health of industrial activities.

New report reveals major water and sanitation resource gaps

Global efforts to provide improved water and sanitation for all are gaining momentum, but serious gaps in funding continue to hamper progress, according to a new report from WHO on behalf of UN-Water. *UN-Water global analysis and assessment of sanitation and drinking-water (GLAAS 2014)*, published biannually, presents data from 94 countries and 23 external support agencies. It offers a comprehensive analysis of strengths and challenges in water, sanitation and hygiene (WASH) within and across countries. Two thirds of the countries surveyed recognized drinking-water and sanitation as a universal human right in national legislation. More than 80% of countries reported having national policies in place for drinking-water and sanitation, and more than 75% have policies for hygiene. The report was launched in New York and Geneva to coincide with World Toilet Day, on 19 November. [Click here](#) for the report, the key findings and press release.

European Environment and Health Process Newsletter established

The WHO Regional Office for Europe has launched the "European Environment and Health Process (EHP) Newsletter" which will keep stakeholders up-to-date on the EHP's continually-expanding body of work. Particularly during preparations for mid-term review of the Parma Commitments in March 2015, the need became evident for a means of sharing news and information on activities. The first issue of the newsletter is available [here](#) and interested readers can subscribe to the newsletter [here](#).

Global report on drowning: preventing a leading killer

The [WHO Global report on drowning: preventing a leading killer](#) highlights that 372,000 people drown worldwide each year. Drowning is among the ten leading causes of death for children and young people in every region of the world. The report sets out the evidence showing a range of effective drowning prevention strategies, and makes a number of recommendations for concrete measures to be taken by national and local governments. With the release of this report, WHO aims to galvanize attention and action to this issue by highlighting how collaboration across sectors can save lives.

Environmental noise guidelines make progress

The WHO Regional Office for Europe has recently held a meeting of the group of experts involved in the development of the Environmental Noise Guidelines for the European Region. The forthcoming guidelines will propose evidence-based recommendations for environmental noise and represent a regional update of the global Guidelines for community noise, originally published by WHO in 1999.

The [guidelines](#) are being developed to provide suitable scientific evidence and recommendations for policy-makers of the Member States in the European Region and will cover additional noise sources not addressed in the guidelines for community noise, such as personal electronic devices, toys and wind turbines.

The guidelines are expected to be launched by 2016.

Healthy Cities celebrate their 25th anniversary

An international conference marked 25 years of the European and global Healthy Cities movement. The WHO European Healthy Cities Network consists of nearly 100 cities and towns from 30 countries in the WHO European Region that are committed to health and sustainable development. Members are also linked through national, regional, metropolitan and thematic Healthy Cities networks.

The Conference's objectives were:

- to demonstrate the importance of action to improve health and well-being at the local and urban levels;
- to explore the key role of local governments in and the implications of local leadership and governance for health;
- to share the innovative good practices of Healthy Cities and Healthy Communities initiatives across WHO regions; and
- to share visions of and strengthen commitment to health and high-quality living in cities.

Further information on the conference and the presentations held is available [here](#).

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