

# Energy efficient buildings and healthy people

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## EFA

The European Federation of Allergy and Airways Diseases Patients' Associations is the umbrella organisation representing at the European level 35 national patients' associations in 22 European countries. EFA is dedicated to making Europe a place where people with allergies, asthma and COPD:

- have the right to best quality of care and safe environment,
- live uncompromised lives and
- are actively involved in all decisions influencing their health.

## Why is indoor air quality important for us?

**Breathing is a prerequisite of life.** Depending on regional culture and outdoor climate, Europeans spend most of their time in indoor environments. To breathe healthy indoor air is therefore considered as a fundamental right by the WHO and apparently it is regularly breached.

EFA representing people with allergy, asthma and COPD, the quality of the indoor air is a fundamental issue for us. Not only because, as it was explained, may a poor indoor air quality result in **increased risks**, especially for children, of developing asthma, COPD and respiratory allergies. People with asthma, allergy and COPD are the first to react (**initial sensitisation**) and the symptoms of their diseases may worsen (**exacerbation**) in case of poor indoor air quality. This is a crucial problem that needs to be taken in due consideration by the public-at-large and the policy decision-makers.

Indeed, although people with allergy, asthma and COPD, together with children and the elderly, are particularly susceptible to indoor air pollution, having experienced the consequences of bad IAQ, everyone should be concerned about poor air in their homes, in the offices they are working or schools they are enrolled at. Poor IAQ is mistakenly believed to be a problem that concerns only a limited number of people in Europe. On the contrary, IAQ is an important issue even for healthy people and a common comprehensive and urgent response should be developed.

The only problem that is specific only to people with allergy is related to the presence of dust and pets mites and pollen in the room.

## What has EFA done in the past to tackle this problem? What are we currently doing?

EFA has always paid attention to this fundamental issue for the health of Europeans. In the past, we were coordinators of the projects **Indoor Air Pollution in Schools** (1999) and **THADE – Towards Healthy Air in Dwellings in Europe** (2002). Both of these projects were funded by the European Commission Directorate General for Health and Consumers (DG SANCO). The former aimed at providing recommendations for healthy schools, including adaptations according to the climate and changes in building practices. Indeed, children spend 1/3 of their day at schools and many studies demonstrate that exposure to indoor air pollutants in schools negatively impacts their performance and is potentially dangerous, especially for students already affected by allergies or asthma. Building upon this project, THADE studied the health effects of air pollution in dwellings more in general, particularly as regards allergies, asthma and COPD.

Currently, EFA is an associated partner of the **HealthVent** project (2010), funded by DG SANCO under the second programme of Community action in the field of health. The objective of this two-and-a-half-year project is to provide health-based ventilation guidelines for non-industrial buildings taking into consideration energy efficiency. These guidelines, for the first time, will link the protection of people's health with another extremely important issue: the necessity to have energy efficient buildings. This could link to a **win-win situation: tackle climate change and improve the quality of life of Europeans**. Several studies show that ultimately the reduction of greenhouse gas emissions is related to the decrease of health costs and the improvement of the quality of life of people in Europe.

*E.g.: if the target of reduction of GHG emissions moves from 20% to 30% by 2020, the EU will save up to 7.9 billion EUR annually in terms of avoided health costs (joint HEAL and Health Care without Harm Europe study, 2010).*

*Based on the existing WHO guidelines for IAQ, HealthVent will develop quantitative guidelines on the necessary ventilation rate in buildings and descriptive guidelines on how to avoid the most common mistakes concerning the compliance, proper design, operation and maintenance of the devices.*

In addition, last November, EFA launched at the European Parliament our four-year project Allergy Awareness Campaign with the presentation of the EFA Book Respiratory

Allergies – Raise Awareness, Relieve the Burden and of the corresponding Call to Action. Among other things, policy-makers are asked to coordinate actions to **improve indoor air quality** that is extremely important for people with respiratory allergies. One of the two MEPs hosting the event (Mrs. Childers MEP, the other one was Mrs. Gardini MEP), who is allergic, underlined the importance of the issue, emphasising the fact that these people are more responsive than others to all kinds of pollutants.

EFA shares best practices within our members and disseminates them among the decision-makers. **Indoor air quality help-lines** exist in our Scandinavian member associations and we believe that the same system should be developed in all EU Member States. This outcome could be reached only if political importance is given to the subject at the EU level.

Last, but certainly not least, EFA is part of the **EU Expert Group on IAQ** established by DG SANCO in October 2006. We are representing the patients' perspective.

### **What do we expect from the future?**

To this extent, EFA believes that more attention is needed towards IAQ. Some **progresses** have already been done. For example, currently the need to guarantee a good IAQ is mentioned in the health and environment strategy (Commission communication, 2003), in the EU Environment and Health Action Programme (EHAP, 2004-2010) and in the Parma Ministerial Commitment to Act (adopted by the responsible European Ministers and WHO representatives, 2010). Apart from these environmental documents, IAQ is mentioned as well in other single market texts. In particular, both the Energy Performance of Building Directive (EPBD, 2010) and the Construction Products Regulation (CPR, 2011) emphasised the necessity for buildings and construction materials to guarantee a good quality of the indoor air.

However, something **more** can be done. The public consultation launched by the European Commission on the Seventh Environmental Action Plan (**7 EAP**) mentions indoor air quality as one of the possible key priorities the new plan could aim at. The Commission's proposal for the **third health programme** did not mention IAQ at all. Amendments were tabled by MEPs and the ENVI leading committee at the EP is voting on them this afternoon. The new **energy efficiency directive** itself marginalises the importance of the IAQ. The ENVI committee in its opinion to ITRE asked to take into consideration health in the national energy efficiency plans and when energy audit for consumers and businesses is made as well as to pay special attention to IAQ and adequate ventilation requirements when renovating public buildings. However, despite the favour of the rapporteur and of the ITRE committee itself, these suggestions were not taken into consideration by the trilogue and the agreement reached does not

mention IAQ. This is what the office of the MEP rapporteur of the directive, Mr. Turmes, told us, underlining that this was due to the Member States rather than the EP.

In relation to **ventilation**, we think that building owners/occupants should receive a detailed **guide of how to maintain their ventilation systems** so they can effectively control their own IAQ for comfort and cleanliness. Indeed, if the system does not work properly and breaks down over the time, this leads to new unexpected and preventable costs to install a new one. This is why HealthVent is developing descriptive guidelines together with quantitative ones. In addition, a **clearer regulation that explains on who is the responsibility for coping with mould and dampness due to poor ventilation and/or water leakages** is needed. People do not know exactly if it is up to the owner of the building or to the occupants to do these repairs and in most of the cases this results in stalls and delays that negatively affect people's health. These regulations should be easily accessible for everyone and written in a lay-language.

IAQ is definitely related to ventilation and therefore energy efficient buildings. However, and especially in the perspective of people with allergy, asthma and COPD, it is also linked to the exposure to chemicals, second-hand-smoke and other indoor air pollutants. Therefore, EFA calls the EU to act in these fields: **the ventilation rate is not a panacea for solving the health problems related to poor indoor air quality, but the ultimate solution that should be adopted after an optimal source control has been made**. Concerning exposure to **second-hand smoke**, in line with the Council Recommendation on smoke-free environments, EFA asks the Member States to adopt and implement laws to fully protect citizens from Environmental Tobacco Smoke (ETS) in enclosed public places, workplaces and all forms of public transportation, as cited by Article 8 of the WHO Framework Convention on Tobacco Control (FCTC).

*It was proven that 7,300 adults including 2,800 non-smokers died as a result of ETS exposure at their workplace in the European Union in 2002. In addition, a further 72,000 adult deaths, including those of 16,400 non-smokers, were linked to ETS exposure at home. A review of the evidence on health of passive smoking showed that it causes lower respiratory illness and contributes to the symptoms of asthma in children. To limit these effects, MSs should adopt a normative law stating children's right to grow up in a smoke free environment. Furthermore, smoking should also be forbidden in cars, as it seriously affects the health of passengers, children in particular, and has a negative impact on concentration. Exposure to second-hand smoke is extremely harmful and it should be limited as much as possible to*

*ensure a high level of protection of human health as stated by the Treaties at the basis of the EU.*

Concerning **Volatile Organic Compounds (VOCs)** emitted from building materials and furnishings supplies as well as from some household activities, such as cleaning, use of deodorisers and fragrances, we do believe that a **labelling system** is necessary to let the consumers know the impact the products are buying have on the quality of their indoor air. Currently, systems are in place in some Member States for the construction products and the European Commission is trying to reach a compromise to harmonise these systems. However, we want a label on all products and not only construction materials. Even electric and electronic equipments, cleaning materials, furnishings should have such a label allowing consumers to make better informed and health-conscious choices. This labelling should be **easier understandable by the lay-public** and could be **accompanied by information on how occupants of the building may maintain the product to guarantee a good IAQ seasonally.**

What EFA wants is that, on the one hand, IAQ is considered in all relevant EU policies. It is a **cross-cutting issue** that should be taken into account when legislating in health, environment, energy, climate change, research and single market. On the other hand, we believe that something specifically dedicated to IAQ should be put in place. Therefore, we call upon policy-makers to issue a **Green Paper on IAQ**, a strategic view on this important issue for the health of European citizens to identify the gaps and next steps to tackle the negative consequences of a poor IAQ. EFA asks the European Commission to adopt a strategy to encompass all these elements and the recommendations issued by the EU Expert Group on IAQ meetings EFA is part of.

Next year is the **European Year of Air 2013** and we hope that this could be the perfect moment to give political resonance to the issue of IAQ. In addition, it will happen in conjunction with the **revision of the ambient air quality and clearer air directive (2008)**. The European Commission will have the possibility to invert the current trend and assign to IAQ the importance it deserves. Air quality, mainly outdoor air quality, has received great attention in recent decades, whereas IAQ has been largely ignored.

However, **IAQ is not, and should not be, the Cinderella of the air pollution field.** 2 million Disability Adjusted Life Years (DALYs) in the EU 27 is the annual burden of diseases related to IAQ and, as such, **this issue needs to be properly regulated to guarantee that everyone has the fundamental right to breathe healthy indoor air.**