

# Work Fever



## **A report by Allergy UK into allergies in the workplace**



*Produced in association with Forbo Flooring Systems*



**Foreword by Maureen Jenkins, Allergy Nurse Consultant**  
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Much has been reported about Sick Building Syndrome (SBS), the condition which focuses on the frequency of symptoms in buildings due to indoor climate problems and chemical exposure. But Allergy UK has long been concerned about how the workplace and how the office environment actually impacts allergy sufferers.

By 2015, 50% of Europeans will have some form of allergy<sup>1</sup>, and with indoor allergies on the increase, Allergy UK has put the office under the microscope.

Having examined the hotspots within the home, Allergy UK has widely publicised advice on dealing with indoor allergies. But what happens when we go to work? We have little control over our working environment, so what affect is this having on our health?

Allergy UK carried out research amongst office workers, primarily allergy sufferers, and respondents were questioned on their office environment. The results were enlightening. A large amount of office workers surveyed had experienced worsening of their allergic symptoms as a result of their office environment.

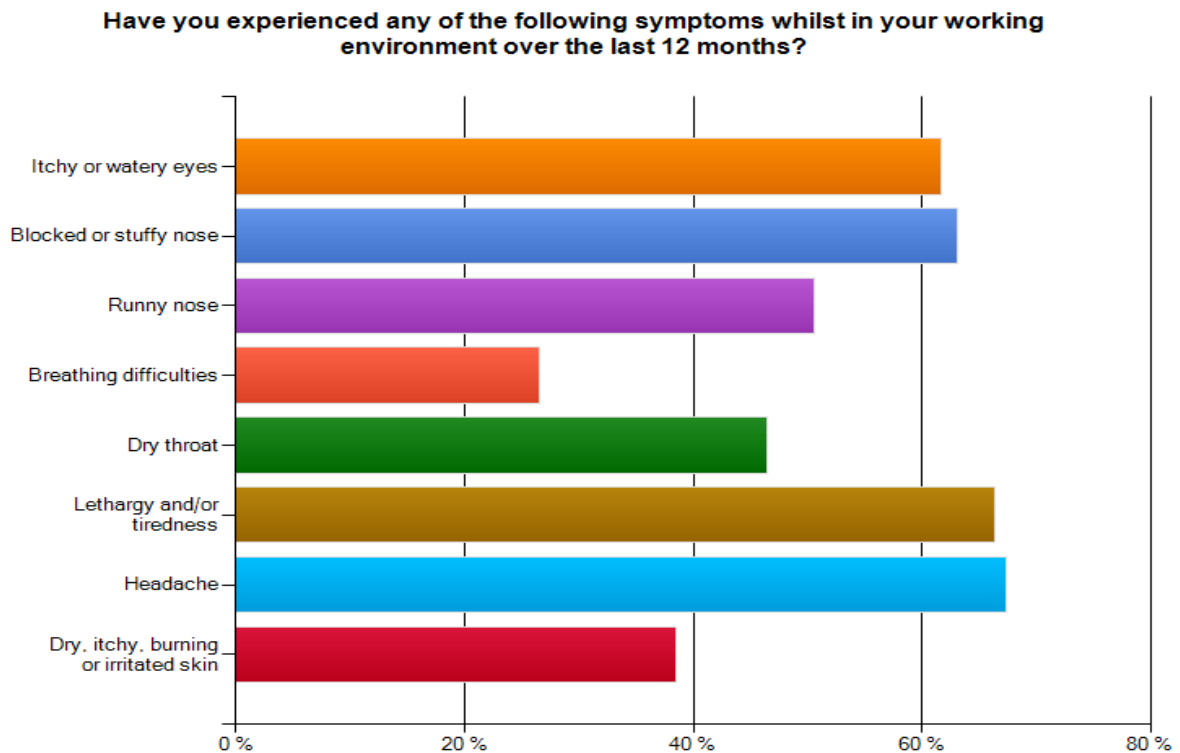
The results are of concern for Allergy UK because it is difficult for individuals to exercise the same control over their work place. Management of allergies becomes increasingly difficult when in communal spaces, so it's not surprising that a great deal of allergy sufferers have experienced a reaction at work.

This report outlines the results of the Allergy UK survey, supported by Forbo Flooring Systems, carried out amongst over 1000 allergy sufferers. From the research findings, Allergy UK estimates that **at least 5.7 million people could be allergic to their work place.**

There are however, steps that both employees and employers can take to reduce the likelihood of an allergic reaction at work. To prevent this figure from rising, Allergy UK believes more people need to understand what causes indoor allergies and be able to recognise the symptoms.

## WORKPLACE SUFFERING

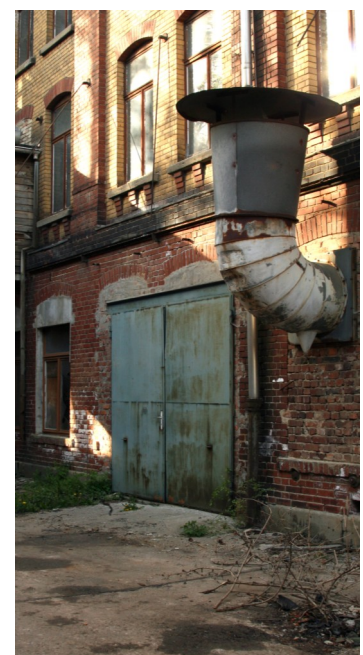
The Allergy UK research flagged a worrying amount of symptoms in the workplace that could be indicative of an allergy. From nasal problems, eye conditions, dry throats, breathing difficulties, lethargy, headaches and skin irritations, 95% had experienced one of these symptoms in the office. **But over a quarter (27%) cited these symptoms as being made worse by their workplace.**



### Lack of ventilation is an office workers worst enemy

Headaches and lethargy were the most commonly reported symptoms in last 12 months at work. But, 62% of respondents had experienced itchy or watery eyes, and 27% breathing difficulties over the last year in their office.

According to Allergy UK, headaches, lethargy and a dry throat can be caused by poor ventilation. In fact, only 9% of those who experienced breathing difficulties at work, worked in an office they considered well ventilated. The workplace was only classed as 'well ventilated' for just 10% of those who'd suffered a dry throat and 12% of those who experienced lethargy and/or tiredness, meaning that ventilation is a key area on which to focus.



## 'Work Fever'

While there could be other factors impacting symptoms; for example, use of printers, PCs what can't be ignored is that overall **27% of the sample said their symptoms were worse in the office**. If this figure is taken as a representation of allergy sufferers in the UK, it means that **5.7million people could be allergic to their office**.

**5.7million  
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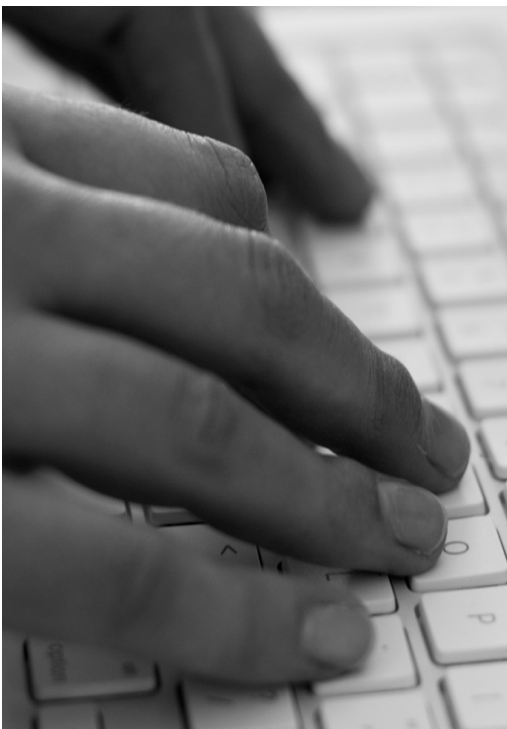
In addition to this, a further 51% of those questioned said that sometimes their symptoms were worse in the office so the potential impact of office environment should not be underestimated.

When it comes to the most symptoms that were exacerbated by the office, again breathing difficulties came under the spotlight. 34% of those who had experienced problems with breathing at work said it was worse in the office; and a further 56% said their symptoms were sometimes worse.

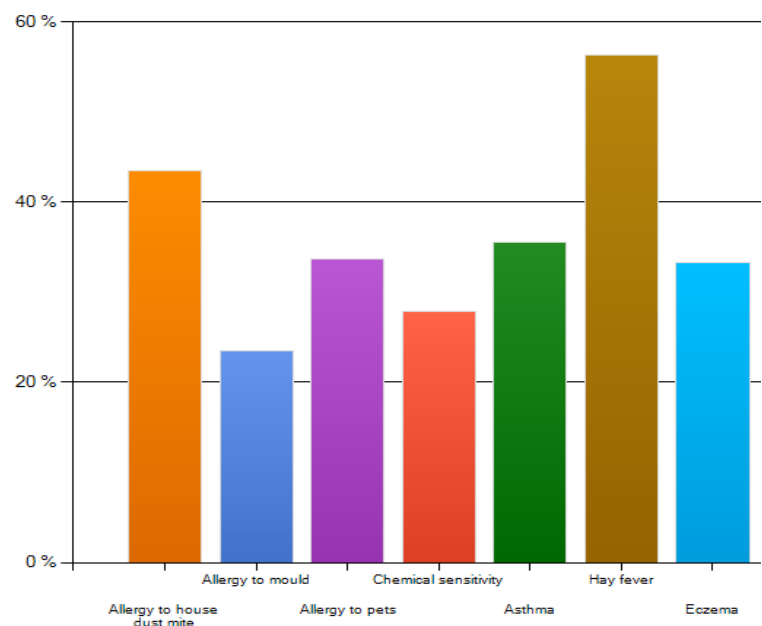
## Allergies in the workplace

Alarmingly, over half of the group surveyed had experienced an allergic reaction whilst at work.

Over a third (36%) suffer from asthma and while 43% said they reacted to house dust mite, those with asthma, rhinitis and atopic eczema sufferers are likely to be allergic to house dust mite allergens in the workplace as well.



Do you suffer from any of the following?



In fact 70% of those with breathing difficulties at work also suffered from asthma so a management plan in the work place is needed to control symptoms. 65% of those with breathing difficulties also said they reacted to house dust mite, which is not surprising as 80% of asthmatics also have rhinitis <sup>ii</sup>

Eczema was commonplace, with over a third of the respondents suffering.

Other allergies and sensitivities prevalent amongst the group included over a third (34%) who said they had a pet allergy, while 28% who said they were sensitive to chemicals. Chemically sensitive people also seem to have an increased tendency to become affected by other allergens such as house dust mites, moulds and animals.

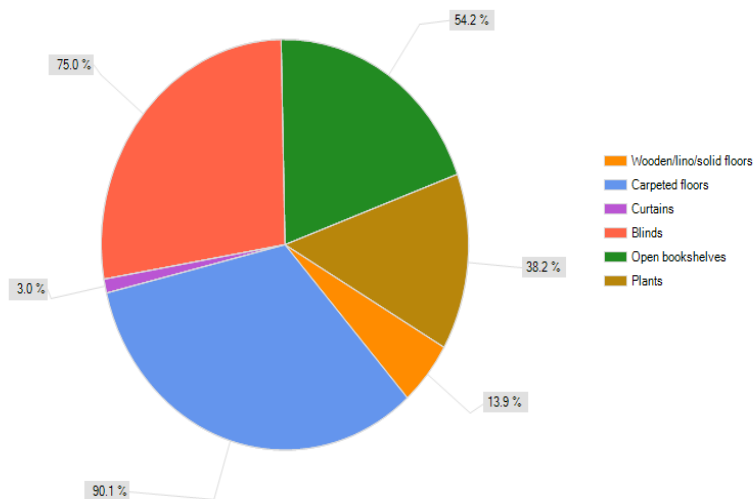
### So why are allergies and symptoms sometimes worse in the workplace?

According to Allergy UK there are numerous ‘hotspots’ around the office that can have huge implications for allergy sufferers.

90% of office workers surveyed reported that their workplace has carpeted floors. Carpets and soft furnishings can harbour house dust mites and their allergen.

The ideal office flooring according to Allergy UK would be solid flooring or floors that carry the Allergy UK Seal of Approval, like Flotex flooring or Marmoleum. These floors have undergone rigorous scientific testing to ensure they are of benefit to allergy sufferers and reduce allergens.

Does your office have any of the following?



### Spotlight on house dust mites

House dust mites are tiny creatures, about a quarter of a millimetre long. They feed on human skin scales and thrive in humid environments. Mites are found in carpets, soft furnishings and outer clothing. In people allergic to dust mite, it is not the mite itself but proteins in their droppings which cause the allergy. Each mite produces about 20 of these waste droppings every day which fragment and continue to cause allergic symptoms even after the mite has died.

House dust mite allergy is very common and is associated with asthma, eczema and allergic rhinitis.

But it's not just flooring and furnishings that can cause problems, 54% said they had open bookshelves, which when you remove books or items from the shelves, could disturb any dust that has collected, and can release the allergen into the atmosphere.

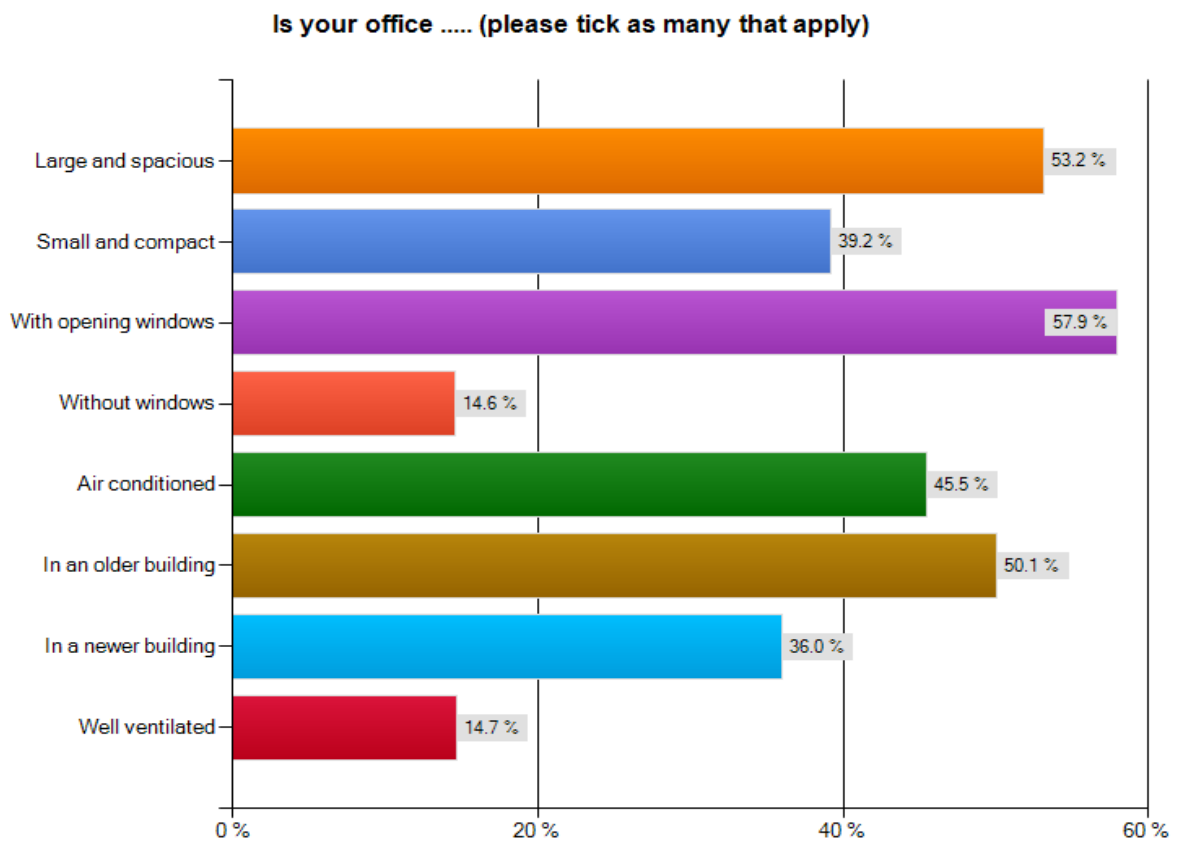
38% have plants in the office which can harbour moulds. Moulds release spores and it is these spores that cause the allergic reactions in people. A recent piece of research by Allergy UK <sup>iii</sup> found that nearly a third (31%) had an allergy to moulds.

But lack of ventilation is the big enemy, as referenced previously, the majority of those with prevalent symptoms at work do not, in the main, consider their office to be well ventilated. Of the overall sample only 15% of the sample said their office was well ventilated.

45% did report that their work place has air conditioning but this needs to be serviced regularly to ensure efficiency.

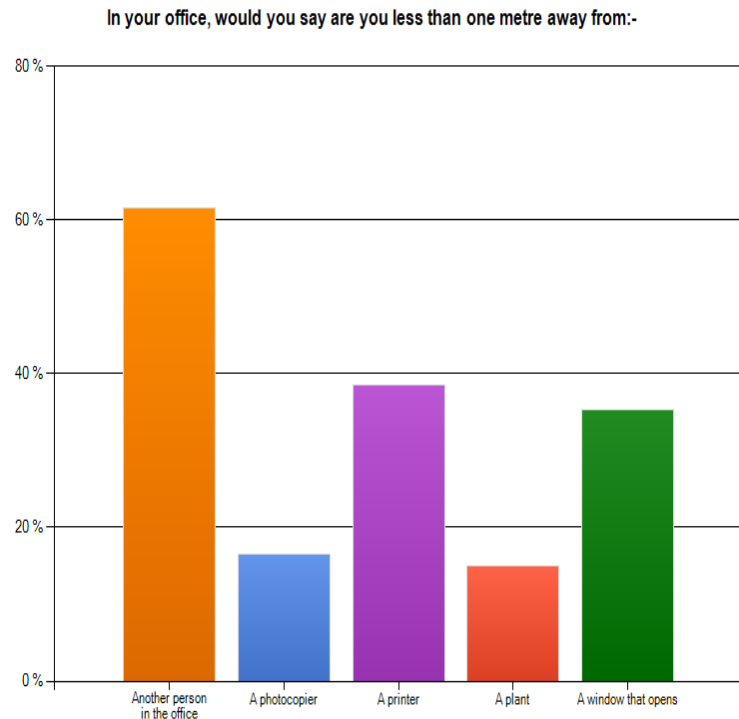
*“Although ventilation from fresh air is ideal, in offices where there are no windows or the outside air is polluted, air conditioning is essential. On days when the pollen count is high, particularly during early morning & late afternoon, windows should be closed. In this instance opt for products that are tested by Allergy UK and capture airborne allergens such as air purifiers. Air conditioning units that are inadequate or not cleaned and serviced regularly can contaminate the air.”*

**Maureen Jenkins**



While 58% of the office workers questioned said they have opening windows, a majority of people surveyed also suffered from hay fever. The issue here is that opening windows at certain times of the day during the pollen season can be problematic for hay fever sufferers.

It's not just the size and space of an office that can impact on people's health. The objects and even people we are surrounded by in the workplace can trigger a reaction. When it comes to the things that are close by, we asked respondents to advise what they were within a metre of at work.



39% of respondents were very close to a printer and 16% were in the vicinity of a photocopier, both pieces of equipment have been known to give off fumes, which could cause had adverse effect on anyone, but those with allergic airways i.e. asthma or rhinitis are more likely to react.

While being within close vicinity of someone in the office is quite normal, 61% sat within a metre of someone else; meaning it could be an issue when it comes to pet allergens.

34% of respondents cited that they had a pet allergy; it is these people who could react to allergens brought in on people's clothes, especially cat allergen.

### Spotlight on pet allergens

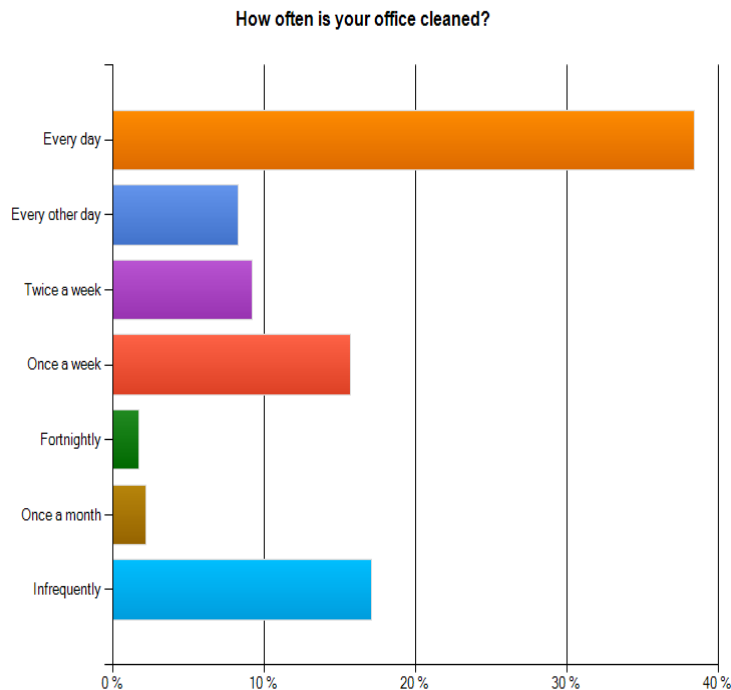
Dog, cat, in fact all animal allergen, is in the animals' saliva, sweat and urine. Animals frequently groom themselves so the allergens coat the hair and skin cells (dander), which, when shed, spread throughout the home or other buildings. Once the saliva dries, it becomes airborne very easily.

These allergens can be very persistent in the environment, with detectable levels found in homes where no pets have lived for many years, and dog and cat allergen can be found in schools and workplaces, having been brought there on the clothing and shoes. Cat allergen in particular is very 'sticky' in this way.

In dogs, routine and proper grooming, preferably outdoors, has been shown to greatly decrease shedding of hair and may decrease skin irritation and secondary bacterial infection. Grooming, preferably by someone other than the sensitive individual, should therefore be an important part of a management strategy for dog-allergic patients. Horse allergen on riders' clothes can also be a trigger for symptoms.

## Cleanliness

The frequency of office cleaning leaves a lot to be desired. The survey showed that cleaning of offices is infrequent and doesn't appear adequate enough to prevent the build up of house dust mites and allergens.



**17% said  
their office is  
cleaned  
infrequently**

While 38% had their office cleaned daily, this figure is nowhere near high enough. 37% said their office is cleaned just once a week or less, while a worrying 17% (nearly one in five) said their office is cleaned infrequently. Even if the office environment was stripped of furnishings and well ventilated, if the workplace isn't cleaned regularly the office worker is more likely to suffer. Cleaning can adequately be achieved without the use of chemicals.

### Spotlight on Chemicals

Chemicals enter the body by being ingested, inhaled, injected, or by being absorbed through the skin. Sensitivity to chemicals has been called the '20th-century disease' as we are exposed to an ever increasing number of chemicals in our food, water, consumables and environment. Our ability to cope with this increasing load on the system cannot be infinite. It is therefore sensible for us all to reduce the load of chemicals we come into contact with on a daily basis.

People who suffer from allergies are more prone to react to chemicals, because of their already inflamed or sensitive airways or skin, although any one can have an adverse reaction to chemical exposure.



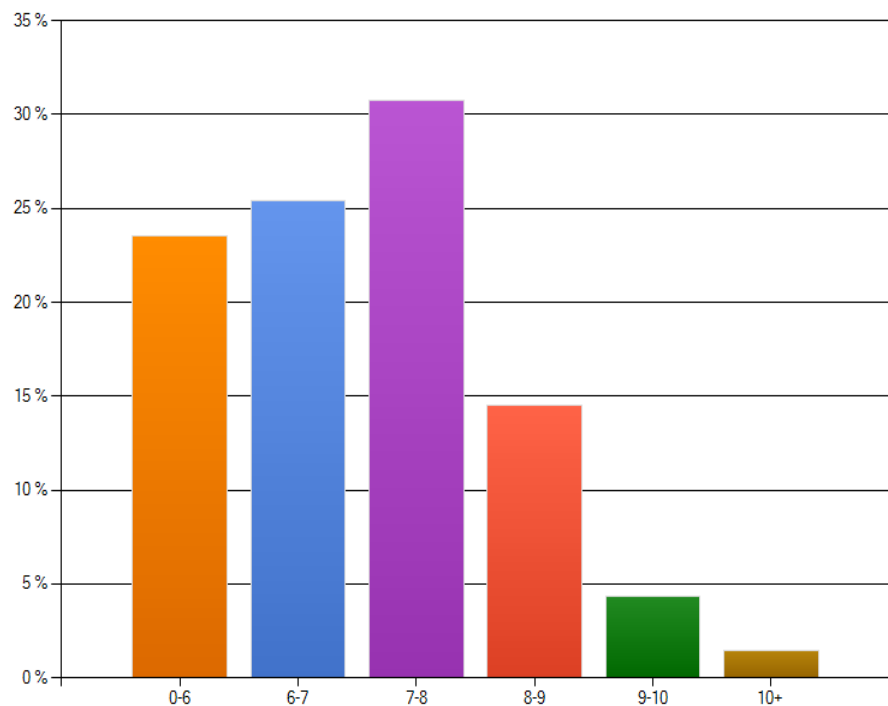
## Chained to our desks

Spending an increasing time at the office isn't just bad for our work/life balance but it can also be bad for our health. The majority of office workers questioned spent seven hours or more at their desk, with over 20% spending 8 hours or more. Combine this with the fact that people's desks are visibly dusty and cluttered, and it is not conducive to a healthy working environment.

*"A third of respondents said they had a dusty desk, so while the office cleaners might not be up to scratch, you can take responsibility and keep your close working environment, clear, uncluttered and dust free. By minimising clutter and damp dusting regularly you'll help to protect yourself from house dust mite allergen."*

**Maureen Jenkins**

On average, how many hours do you spend at your desk each day?



## Formaldehyde and furniture

New furniture can give off Volatile Organic Compounds (VOCs) such as formaldehyde, a naturally occurring gas made of carbon, hydrogen and oxygen.

The effects of formaldehyde have been widely reported and can affect the eyes, nose and throat. Formaldehyde is common in pressed wood products and nearly half of respondents said their office furniture was mainly made from MDF, while 10% said their office furniture had been renewed in the last year.

Some people are sensitive to formaldehyde but others have no reaction at all. When you buy a new piece of furniture at home you can often smell the formaldehyde. Most people simply associate this as a sign of being new, but for those with chemical sensitivities it is a potential irritant. European furniture and materials often have to meet more stringent standards and give off fewer gases such as formaldehyde. Floorings also nowadays can be tested for VOCs through the AgBB/DiBT evaluation scheme, which foster the development of low emission products.

**42% of allergy sufferers have taken time off work because of their allergy**



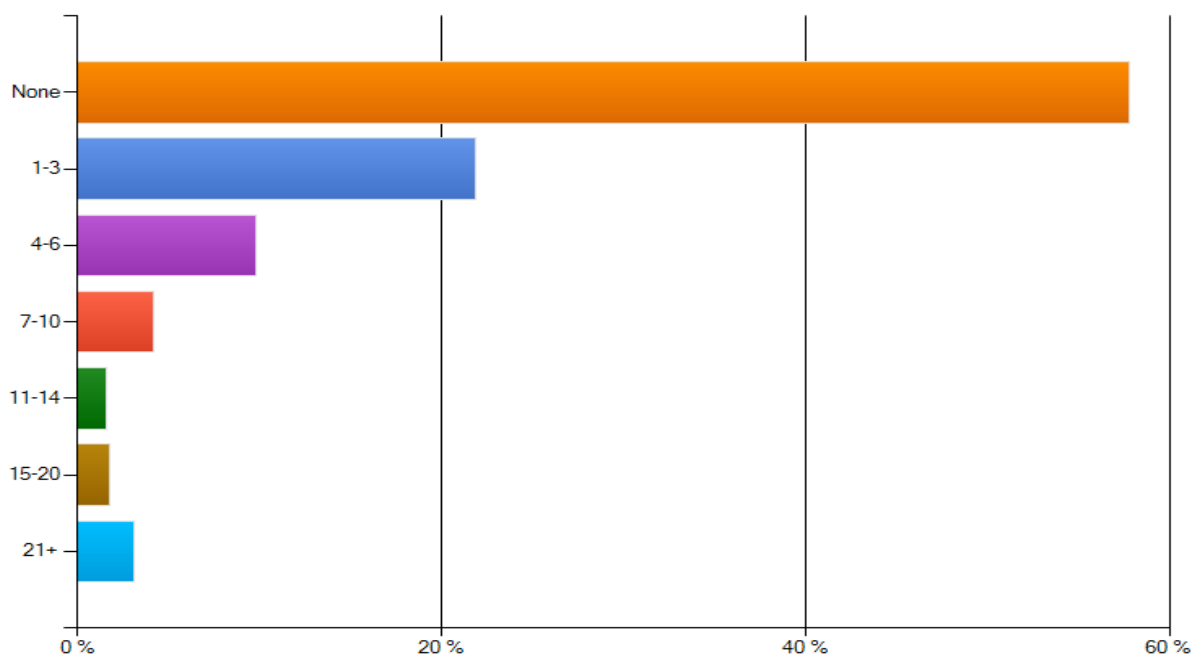
**Productivity**

While the report has looked at mainly at the impact that the working environment has on the individual, allergies don't just have an impact on the employee. According to the research they are also having a significant effect on productivity.

73% of those questioned took time off sick in the last 12 months, the majority of the workforce has had some form of sickness in the last year, which is not unusual.

However, the real area of concern is that 42% of allergy sufferers took time off work because of their allergy. 14% of sufferers actually took between four and ten days off sick because of their allergy, and these are figures that could be addressed by actively minimising allergens in the work place.

**Of the days that you took off sick, how many of these would you estimate were a result of your allergy?**



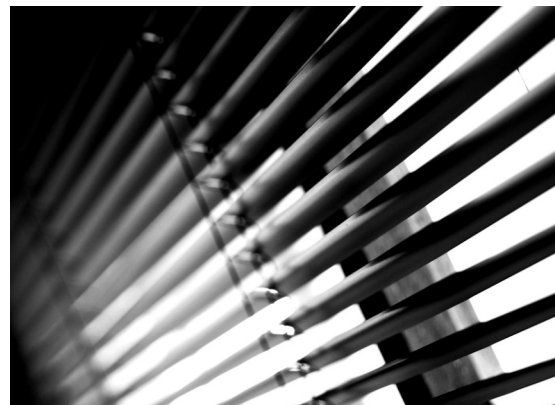
## Conclusions

This report has highlighted areas of real concern for those with allergies. There are many 'allergen hotspots' in the work place and while the findings of this survey refer directly to an office environment, they could be just as applicable to other 'closed' working environments in establishments like shops, hospitals and laboratories.

There are a number of steps that employees and employers can take to minimise risks and reduce allergens in the workplace. These steps are cost effective and the employee can do just as much as the employer to affect their own direct working environment. While it is unrealistic to expect employers to invest thousands in stripping back offices, the affect of allergies on productivity needs to be realised.

### Allergy UK advice:

- Ventilation is extremely important. Whether it is windows, trickle vents or air conditioning system. Ensuring that you have clean air in and around you is really important. If however you have hay fever sufferers in the office, keep windows closed for the first part of the morning and also late afternoon
- If you have a heating, ventilation and air conditioning (HVAC) unit installed, make sure it is regularly serviced
- If ventilation is limited, use an effective air purifier to help remove and reduce allergens such as pollen, house dust mite debris and mould spores
- Review flooring and furnishings. Carpets on concrete floors can trap moisture allowing dust mites and mould spores to thrive. Opt for a smooth or flocked Allergy UK approved flooring that has been scientifically tested by Allergy UK and awarded the Seal of Approval. Visit <http://www.allergyuk.org/products-and-services/listing> for more details
- Ensure that plants are regularly watered and the top soil removed regularly to avoid moulds, or cover with pea shingle



- Ensure office cleaners have effective cleaning methods and equipment:
  - A HEPA vacuum cleaner will ensure that pollens and allergens are trapped adequately
  - Avoid the use of chemicals. 'Microfibre' cleaning cloths and mops do not contain chemicals, neither do they need to be used with any added chemicals. When used dry or damp they attract dust to the cloth where it stays
  - Use natural air fresheners . Place one teaspoon of bicarbonate of soda in a spray bottle and add two tablespoons of white vinegar and two cups of clean water. After the foaming has stopped replace the spray top and shake well (you can also add two teaspoons fresh lemon juice or essential oil).
  - To remove mould from window frames and sills etc and prevent the re-growth of mould. Mix Borax Powder or bi-carbonate of soda with a little water into a paste consistency. Using a stiff brush (an old toothbrush is ideal) scrub the area of mould with the paste, then wipe clean.
  - Windows and glass can be cleaned by adding two tablespoons of vinegar to a small bucket of warm water, and then the surface buffed with a clean dry cloth
- Take control of your personal desk environment, keep it clear and uncluttered and damp dust twice a week
- Hang coats away from the desk and 'traffic' areas to prevent dust and allergens from being disturbed and released into the air
- Drink plenty of water throughout the day and always ensure that you take your prescribed preventative medication if you have asthma, rhinitis or eczema

**For help and advice and more information about allergies,  
call Allergy UK on 01322 619 898 or visit [www.allergyuk.org](http://www.allergyuk.org)**



<sup>1</sup>EFA 2011

<sup>2</sup>Co-existence of asthma & allergic rhinitis: a 23 year follow-up study of allergic students. Greisner, WA3rd. Settupane, RJ. Settupane, GA Allergy Asthma Proc. 1998 Jul-Aug; 19(4): 185-8 Epidemiological evidence for asthma & rhinitis comorbidity. Leynaert, B. Neukirch, F. Demoly, P. Bousquet, J. J Allergy Clin Immunol 2000; 106: S201-5

<sup>3</sup> research conducted by Allergy UK, October 2011. Base sample of 1,610 allergy sufferers

This report was produced by Allergy UK, June 2012

Allergy UK is the leading national medical charity providing advice, information and support to people with allergies. Allergy UK acts as the 'voice' of allergy sufferers, representing the views and needs of those affected by this multi organ disease.

Allergy UK makes a difference through a dedicated helpline and network for sufferers. The charity provides invaluable information and guidance to empower sufferers so that they can manage their symptoms and receive appropriate diagnosis and treatment.



Allergy UK Helpline

**01322 619898**

(9am to 5pm Monday to Friday)

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