



One of the 'damp'
New Zealanders
from the new DVS®
TV commercials.

The great indoors.

Improving indoor
air quality for people
with asthma.

It's probably fair to say that most people would consider indoor air pollution a relatively minor problem compared to outdoor pollution. But when you consider that we spend about 90% of our time inside – surrounded by contaminants such as dampness, bacteria, viruses, gases and chemicals to name only a few – indoor air pollution can actually be a bigger health risk than outdoor pollution.

Ventilation of the home with fresh, filtered air is important for the health of any family. However, for people with asthma (who are allergic to the microscopic particles found in the air that we breathe) the benefits are even more important. A DVS® home ventilation system will push out the stale, moisture-laden air in the home and replace it gently and naturally with fresh, filtered air from outside. In doing so, it can actually improve the health of people who suffer asthma and other respiratory illnesses by significantly improving indoor air quality and reducing exposure to inhaled triggers and irritants. This is achieved in three ways, by:

- controlling excess moisture and condensation;
- filtering the air that comes into the home from outside (via the roof space);
- pushing out the airborne pollutants and irritants that originate inside the home.

Controlling excess moisture and condensation.

In an independent field study carried out by a team from Massey University, moisture was identified as a significant problem in New Zealand housing, with excessive condensation, mildew and dampness affecting 45% of New Zealand homes.

The study, which was carried out by Massey over two winters, looked at the problems of excess moisture in New Zealand homes and the effectiveness of the DVS® system in dealing with them. It identified sources of moisture such as dampness rising from the ground, humid outdoor air, building materials, occupants and their activities such as showering and cooking, with up to 70 litres of moisture a day typically entering a house.

The study states that dampness in houses is a serious health concern as:

“... moisture can provide a ripe environment for fungi and dust mites to propagate ... allergens produced by fungi and dust mites have been highlighted as leading causes of asthma and triggers for asthma attacks. New Zealand has the second highest rate of asthma in the world.”

Dampness can also cause bacteria, leading to respiratory illness, according to evidence from a scientific survey conducted in 2007 by the Ontario Lung Association. Their findings suggest an association between bacteria in housing and increased incidence of upper respiratory infections.

With a DVS® ventilation system at work controlling condensation and excess moisture in the home, the growth of mould, mildew and bacteria can be halted, and the number of dust mites significantly reduced, if not eliminated.

Filtering the air that comes into the home from outside.

DVS® ventilation systems use high quality, internationally-rated filters to filter out dust, pollen, plant spores and other inhaled triggers from the air before they come into the home (via the roof space).

While such allergens will always be present in fresh, outside air, people who are allergic to such triggers can choose to stay inside their DVS®-ventilated homes (with windows and external doors closed) breathing filtered air to significantly reduce their exposure to these irritants and, therefore, their symptoms.

Breathe easy with
Asthma NZ & DVS®

DVS® is proud to be an official Asthma NZ partner, with Asthma NZ recognising that the installation of a DVS® home ventilation system may assist those with asthma-related illnesses and other respiratory

conditions. The partnership is an obvious fit for DVS® as the DVS® ventilation system has been proven by Massey University to reduce the mould and fungal spores that can be triggers for people with asthma. In

Pushing out airborne irritants that originate inside the home.

Good ventilation in the home can easily and effectively reduce a number of harmful indoor air pollutants that can trigger asthma and allergies, such as:

Emissions

Gases (e.g. volatile organic compounds, including formaldehyde) and particles emitted from building materials, furnishings, appliances, clothing and products used in cleaning and personal hygiene (e.g. perfume, deodorants). The Canadian survey found that the respiratory effects caused by such products included wheezing, coughing, decreased lung function, exacerbation of asthma and increased risk of pneumonia in children.

Combustion by-products

The Canadian study also found that emissions from burning wood, gas, oil, kerosene, propane and candles can result in elevated concentrations of potent contaminants including aldehydes, polycyclic aromatic hydrocarbons and carbon monoxide.

Viruses

Airborne viruses can be transmitted from person to person indoors, particularly where fresh air ventilation is inadequate. Sufficient ventilation, on the other hand, can dilute airborne viruses in the presence of infected individuals.

Animal dander and cockroach antigen

Ventilating the home with a DVS® system ensures that any contaminated air inside the home is continually pushed out, and replaced by drier, fresher, filtered air instead – the health benefits of which have been proven by the Massey University study:

“... the results appear to show that installation of the DVS® improved the health of the occupants. Overall, the incidence of symptoms experienced by participants decreased by more than 50% after the installation of the DVS®, suggesting that the level of pollutants present in the indoor air were reduced.”

And finally:

“Without exception, all participants felt that condensation within their houses was either significantly reduced or had disappeared entirely.”

References:

Massey University Study (2002) on the Effectiveness of DVS®
2007 Ontario Lung Association – Scientific Review

In addition, DVS® air filters can virtually eliminate the pollens and other airborne particles and irritants that can be so devastating for people who suffer from respiratory illnesses.



Good news for allergy sufferers, just in time for Spring!

If you're no stranger to sneezing or wheezing, then there's a DVS® air filter that's perfect for you – or anyone else in your household that suffers from hayfever, asthma and other allergies caused by airborne particles and irritants.

Called the 'F6', this high-grade filter fits onto the DVS® ventilation system to provide a very high level of filtration that's perfect for allergy sufferers. It will eliminate at least 99% (and up to 100%) of visible airborne pollen and dust particles (plus a significant amount of particles that are invisible to the naked eye) and is of such a high standard that it is equivalent to those used in hospitals and food processing factories.

Other filter options include our Standard G4 Filter (which will eliminate at least 80% and up to 95% of visible airborne pollen and dust particles) and our Activated Carbon Filter that greatly reduces smoke smells from wood or open fires in winter.

DVS® is also the only ventilation company to offer BioShield Healthy Infusion treatment of its filters to inhibit the growth of moulds, mildew and odour-causing bacteria. **To find out more about our filters, please call DVS® on 0800 387 387.**



Interest-free offer for O₂ readers.

Install a DVS® before 31st December 2008, and we'll give you nine months to pay – interest-free and no fees, just the true cost spread over nine months*.

So why wait any longer to improve your family's health? It's just too important. Contact us today to arrange your free, no-obligation quote (please mention you saw this ad in the O₂ magazine so we can ensure you receive the nine month interest-free deal):

0800 387 387

*Subject to normal lending criteria. Some conditions apply.

www.dvs.co.nz



Heart of a Healthy Home™