



Asthma and IAQ: Two Families'  
Experience with nanoe™ X Air  
Purification

If you are one of the 4.6 million Canadians who have asthma, you are probably very sensitive to the quality of the air you breathe. Exposure to allergens such as dust, pollen pet dander, and pollutants such as smoke and chemical fumes, can irritate airways and trigger asthma symptoms. As you may know firsthand, it can be difficult to avoid polluted air when you are outside or away from home, but you can take steps to minimize irritants inside your living space. This case study features two households with asthmatic family members who improved their indoor air quality (IAQ) with Panasonic's patented nanoe™ X air purification technology.

## About the Families

Panasonic worked with Asthma Canada, a nonprofit organization that helps people with asthma, to identify qualified candidates for this study. Participants were required to own a house and have multiple family members living with asthma that can be triggered by allergens or pollutants. Asthma Canada was able to connect us with two qualified families who were willing to try Panasonic IAQ products and then report on their experience after eight weeks.

## Profile of family #1

Thelma, age 50, and her husband Ron, 49, live with their two children, both 18 years old, in Scarborough, Ontario. Each family member was diagnosed with asthma as a child. Thelma described her family's asthma as moderately severe, triggered by pollen, pet allergens, air pollutants and exercise. She reported that they had experienced wheezing, shortness of breath (once or twice a week) and chest tightness during the four weeks leading up to our initial contact. These symptoms disturbed their sleep once or twice and caused them to use inhalers two or three times per week. Thelma characterized her family's asthma as "somewhat controlled" during this four-week period. Before the study began, Thelma was unsure of the air quality in her home and she said that her family did not make a conscious effort to maintain good IAQ.



Thelma's two children

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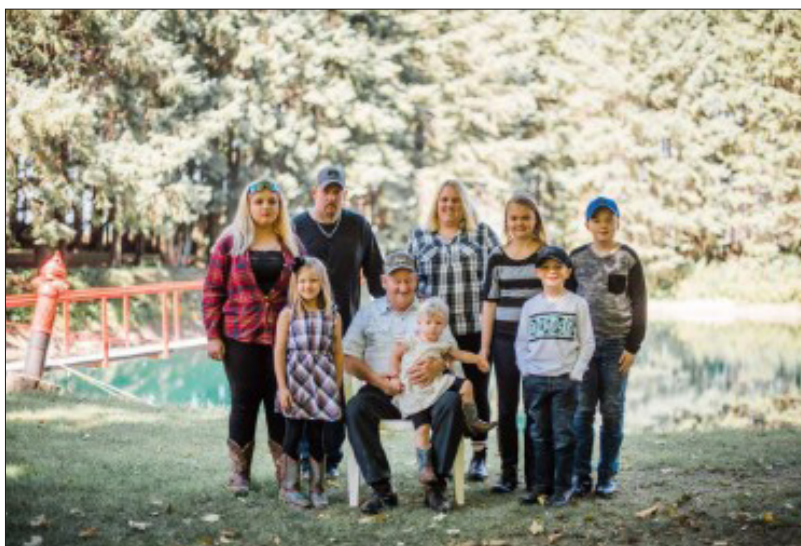
## Profile of family #2

Our second family lives northwest of Kitchener, Ontario, in a small town called Milverton. Sheila, age 40, has moderate asthma symptoms, while two of her children, ages 9 and 12, respectively, suffer from severe asthma. Sheila said that her family's asthma is triggered by pollen, pet allergens, air pollutants, exercise, cold air, weather changes and intense emotions.

Before participating in this study, the family had already tried to improve IAQ by running an air exchanger, operating air purifiers in every room, decluttering the house, removing all the carpets, and replacing cloth furniture with leather. In addition to their regular housecleaning schedule, the family diligently changes the furnace filters, has the air ducts cleaned, and replaces the children's mattresses every couple of years.

According to Sheila, spring and fall are the worst times of year for her children because of the weather changes. During the warm months, on days when the pollen count is high, they simply have to stay inside. Throughout the year, the kids miss school and must restrict other activities because of asthma. They also have to endure arduous hospital stays and cope with the side effects of their medication.

In the four weeks prior to our initial contact, Sheila and her kids experienced shortness of breath, difficulty breathing while exercising and loss of sleep. The children had these symptoms daily, causing them to use their inhalers three or more times per day. The children's asthma symptoms also woke them two to three nights per week. Sheila described her family's asthma as "poorly controlled" and the IAQ in her home as "bad" during this four-week period.



Sheila's family

## nanoe™ X Products used in the Study

Panasonic installed a ClimaPure® XZ ductless mini-split heat pump in the living room of each home and a ceiling-mounted WhisperAir Repair® spot purifier in the bedroom of each family member with asthma. Panasonic covered the full cost of these products, including installation, and the families kept them after the eight-week trial period ended on April 19th, 2025.

## How nanoe™ X works

nanoe™ X uses electrostatic atomization technology to recreate a natural cleansing process that inhibits allergens, neutralizes odours and breaks down hazardous substances in the air and on the surfaces inside your home. The result is indoor air with a natural freshness that is healthier and more pleasant to breathe. Even better, nanoe™ X is maintenance free so you never have to change a filter.



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## Family #1: Fresh Air made a Difference

At the end of the eight-week study period, Thelma reported that her family experienced less sneezing and nasal congestion, and their quality of life was improved. She also noted a general reduction in unpleasant odours.

"I liked how the air was so fresh and crisp. The heat pump consistently kept the room at a great temperature," said Thelma. With the WhisperAir Repair spot purifiers in the bedrooms, she said, "We had less allergy symptoms, especially in the morning when waking up."

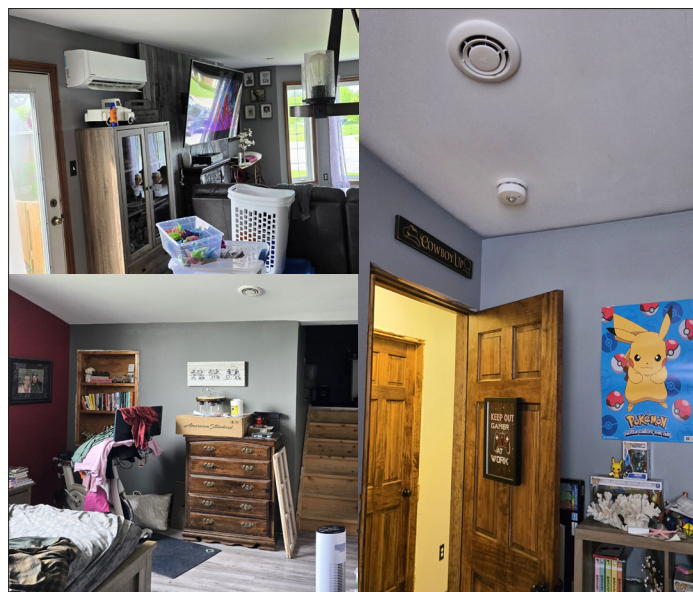
Thelma said she was satisfied with the performance of the Panasonic IAQ products and was likely to recommend them to others.



## Family #2: nanoe™ X had a Positive Impact

After the study period, Sheila reported that her family's quality of life was greatly improved. "We didn't seem as sick—less allergy symptoms," she said. "I was not being woken up as much by my kids or even by my own symptoms at night. I found that we used the inhalers less until the weather changed [in the spring]." She also noticed a reduction in cooking smells and dog odour.

Sheila said she was very satisfied with the performance of the Panasonic IAQ products and was very likely to recommend them to others. "We hardly even knew they were on—not much noise at all."



## Clean Air is Good for Everybody

Canadians spend up to 90% of their time indoors, where air can be five times more polluted than outside. Cleaning up the air in your home can noticeably increase your sense of comfort and well being, especially if you are sensitive to particular allergens and pollutants. Even if you have already taken action to improve your home's IAQ, Panasonic's patented nanoe™ X air purification technology may be able to help you get better results and further enhance your family's quality of life.