

Air-conditioning can spread germs

If it is not maintained properly, it may foster growth of bacteria which people can pick up from air blown into rooms.
WONG MEI LING reports

Many of us in tropical Singapore, with its average humidity of 84 per cent, swear by the cool comforts of air-conditioning.

However your health can be compromised, especially when an air-conditioning system (AC system) is not properly maintained.

If, for instance, dust and mould form as a result, symptoms of allergic rhinitis, an inflammation of the nasal passages, and asthma can worsen, said Dr Hwang Siew

Wai, director of the Bukit Merah SinghHealth Polyclinic. People who spend a lot of time in air-conditioned office buildings have more health problems, said a study done in France by Dr Mark Mendell and published in the International Journal of Epidemiology in 2004.

These problems include breathing difficulties, skin irritations, headaches and tiredness.

Dr Mendell said it could be because the ventilation systems in buildings, especially those with AC systems, spread contaminants into the air in the room.

Also, wet ceilings and walls, from condensation after the AC system is switched off, can breed bacteria and mould which are associated with increased risk of respiratory problems and asthma.

Surfaces in AC systems that remain constantly moist, such as cooling coils and



People who spend a lot of time in air-conditioned office buildings have more health problems, including breathing difficulties, skin irritations, headaches and tiredness.

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Surfaces in AC systems that remain constantly moist foster the growth of micro-organisms.

drip pans, also foster the growth of micro-organisms which can get picked up in the air supplied to the room.

There is even the possibility of contracting Legionnaires' disease, a type of pneumonia caused by breathing in the bacteria-laden mist from the AC's cooling tower.

Even increased obesity has been linked to too much air-conditioning. "Air-conditioning is said to decrease the metabolic rate, therefore causing people to put on more weight," Dr Hwang said. However, he cautioned that more research has to be done to establish a direct link between the two.

Then there is the sick building syndrome. The United States' Environmental Protection Agency has said that it can arise if the AC system does not effectively distribute air in the building. This can lead to symptoms like headaches, irritation in the eyes, nose, or throat, dry or itchy skin and dizziness.

Elaborating, Dr Gregory Chan, senior

occupational health physician at the Office of Safety, Health and Environment, National University of Singapore, said the chief culprit for such illnesses is poor indoor-air quality, not how long one has been in an air-conditioned place.

"This is caused by the accumulation of pollutants indoors which are not adequately removed by the existing ventilation system," he said. These pollutants include bacteria, viruses, mould and even dead rats in the ventilation ducts.

"Carbon dioxide may accumulate too and you may experience some headaches," he added. He suggested that windows be opened at the start of the workday to allow fresh air in. Objects, like old books, which grow mould should be removed. Drinking lots of fluids helps.

Most importantly, Dr Chan said: "If you have a contagious disease, do stay at home or if you really need to be at work, use a face mask to protect others."

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Fact or fiction?

Impact of saunas on colds

The claim: Sitting in a sauna can relieve cold symptoms.

The facts: Scientists recently confirmed the age-old notion that hot liquids can relieve some cold and flu symptoms. However, what about a dose of heat on a much larger scale, say, in a sauna?

With temperatures of 80 deg C or greater, saunas have been recommended for arthritis, asthma and chronic fatigue, among other health problems, since they were used by nomads in Finland centuries ago. Some

reputed benefits have not been examined, but there is evidence that saunas may speed recovery from colds and reduce their occurrence.

Some researchers suspect sauna heat reduces symptoms because it improves drainage, while others speculate that the high temperatures help weaken cold and flu viruses. Why this may help prevent sickness in the first place, however, is unclear. However, research suggests such an effect.

In one study by Austrian researchers, for example, a group of 50 adults were split into two groups and tracked for six months. One group was instructed to use saunas regularly,

while the other group abstained. At the end of the study, the sauna group had contracted fewer colds. "This was found particularly during the last three months of the study period, when the incidences of colds were roughly halved compared to the control group," the scientists wrote.

Other studies have found similar results. However, doctors caution that saunas can be hazardous to those with heart or circulatory problems.

The bottom line: There is evidence sauna use may reduce or prevent cold symptoms.