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Low_Level_PC_Poisons_-_Computer__Fumes_Dust_And_Gases_utf8.txt

Title:
Low Level PC Poisons - Computer Fumes Dust And Gases

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Summary:
Computers continually give out small quantities of irritating and poisonous materials. This article explains how exposure risks can be reduced.

Keywords:
PC poisons,outgassing,sensitive people,good ventilation

Article Body:
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Did you know computer equipment continually gives out small amounts of different gases and fine dusts? Some people are highly sensitive to these.

Plastic PC components are one source, as most plastics are unstable and break down naturally over time, especially when exposed to ultraviolet light and sunlight. (That's the reason why they turn yellow and get brittle.)

Another source comes from vapour produced from traces of manufacturing materials slowly evaporating.

The gases and fumes given off are called 'out-gassing' and only occur in small amounts. But when the equipment is new, the out-gassing is greater and noticeable even to people who aren't particularly sensitive.

This is similar to the smell that we get when we first get into a new car - out-gassing from the vinyl, plastic carpet and hard plastic interiors, as well as the wiring.

A new computer has a similar smell. So to some extent you can avoid outgassing, at least of 'new' volatile components, by buying a good quality 'used' PC.

Other office materials, particuliarly new furnishings, may also outgas - chipboard contains phenolic resins, which release trace amounts of formaldehyde; also carpeting (especially foam padding), paint and fabrics give off obnoxious chemicals when new.

People who have been sensitized (by previous exposure) may react badly to even very tiny amounts of these gases, by getting headaches, dizziness, and respiratory problems. The problems may persist even when the original cause is reduced, or disappears. In such a case it's wise to seek qualified medical advice.

Casings may also be contaminated by fine brominated phenolic dust originally put on as a fire retardant, which can be blown out by fans, circulation or movement.

The best solutions are :-

- Initally, to run any new equipment in an empty well ventilated room to allow most of the outgassing to occur before use.

- Always work in a room with good ventilation and avoid continual high room temperatures–outgassing will increase as the temperature rises.

Laser printers emit a lot of toner dust, which contains carbon and solvents, and quite a few people are sensitive to it. You can smell it when the printer is on, and especially on freshly printed-paper. You may notice wheeziness, coughing, and sneezing.

People working at copy centers and service bureaus often suffer from headaches, and toner dust is the main suspect. NCR paper ('carbonless' paper) can also cause wheeziness.

Good ventilation, drawing air away from the operator and filtering out particles, will help reduce these reactions, but effective ventilation in a commercial or home office is sometimes hard to achieve, especially in sealed buildings.

You can try going outdoors and breathing deeply for 10 minutes every hour or so. Open doors, maybe have a fan on., and avoid routine (multiple) photocopying every single document.

Think long term. Removing even mild poisons from your environment is yet another way to keep safe, stay fitter at the PC and enjoy a healthy computing career!