

## Do you often...

- have to sneeze,
- have a cold, sore throat,
- nervous cough, asthma or chronic bronchitis (COPD),
- inflammation of eyes, bladder or skin,



- pains in stomach, head or muscles,
- feel exhausted and ill

and you don't know why,  
then it is possible that the toner of your laser printer, laser fax  
or copying machine is making you ill. Then you urgently  
should settle this matter!

Please inform yourself on [www.nano-control.de/english.php](http://www.nano-control.de/english.php)  
or [www.krank-durch-toner.de/english.html](http://www.krank-durch-toner.de/english.html) and send us a  
message.

We will help you – free of charge.

**Toner dust  
from laser printers  
can ruin your health!**



**nano-Control has got involved  
with healthy indoor air  
because breathing means living.**

nano-Control informs the public, politicians and authorities,  
supports scientific clarification and solutions and helps persons  
concerned – free of charge, non-commercially and independently.

Please inform yourself and help us with active work or your  
donation to stop the avoidable dangers of laser printing machines!  
It's about your health and the health of your beloved ones.

nano-Control has been awarded benefit to the public and your  
donation is allowed against tax. On request you will be sent a  
donation receipt (from 200€ all donators are automatically sent a  
receipt). Please state your address.

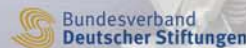
### **nano-Control, International Foundation, Chairman**

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Tax no.: 17/426/03551

### **Donations requested to:**

Donations account no. 1280 387 489  
Sparkasse Bamberg BLZ 200 505 50  
IBAN: DE34 2005 0550 1280 3874 89  
SWIFT-BIC.: HASPDEHHXXX

nano-Control is a member of



and has bound itself to the principles of a good foundation practice.

**Health risks  
caused by toner/emissions of  
laser printers and copying machines**



**International Foundation  
For a healthy indoor air!**



## Beware of particulate matter caused by toner!

- European Commission:  
Annually, only in Europe 310,000 people die because of exposure to particulate matter.
- WHO:  
Chronic obstructive respiratory diseases are the most increasing cause of death—worldwide!
- US Environmental Protection Agency:  
“Most risks for national health arise from indoor air.”

Particulate matter is harmful to your health; it is caused e.g. by exhaust fumes of the industry, cars and ships. Those tiny particles can cause inflammations and thus damage the respiratory tract. Nano particles are even able to enter blood, organs and brain. Possible further consequences are heart attacks, strokes, cancer and premature death. Indoor particulate matter is extremely pollutant because we spend up to 90% of our time indoors and are directly exposed to those pollutants. Beside smoking the emissions of laser printers and copying machines are one of the most relevant sources of pollution but the risks are hardly known.

### Did you know that

- toners consist of fine and ultra-fine particles and are frequently polluted with metals and other pollutants?
- according to official investigations laser printers emit billions of particles per page, among them metallic nano particles from toners?

## The nano worst case!

nano-Control has received almost 3,000 written messages of persons concerned in 23 nations, among them doctors, scientists, journalists, judges and almost 200 policemen, of whom almost every second one reports about equal cases among colleagues. A high dark figure has to be expected.

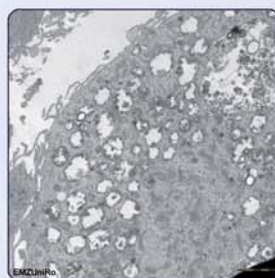
More and more studies from all over the world not only confirm the high emissions but increasingly also the harmful effects (state of research at [www.nano-control.de/english.php#K55](http://www.nano-control.de/english.php#K55)). Research undertaken on behalf of nano-Control have shown that

- after only 30 minutes the emissions cause cell-damaging oxidative stress and allergic reactions with inflammations and disorders for weeks.
- toners and emissions cause oxidative stress also at human lung cells and even have a genotoxic effect. This implies a danger of cancer.

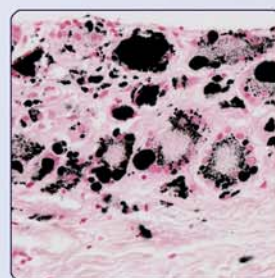
Metallic nano particles of copying machines cause inflammations in the nose and oxidative stress even in healthy test persons as scientists from the Harvard University found out.

Those tiny toner particles can infiltrate the cells. Case by case is proven in human tissue by pathologists (see pictures). Do millions of people already have that dirt of the printers inside them? That would be the nano worst case!

Millions of people breathe in those dangerous emissions, without knowing and without protection. Fortunately, there are solutions available.



Toner particles in a lung cell  
Rostock University, Pathology



Toner in the abdominal cavity  
Essen University, Pathology 2010



- **Printing less!**  
This treats our environment, health and purse with care.
- **Beware of laser printers!**  
Laser printing machines have to be located in separate, well-ventilated rooms equipped with an outgoing air mechanism and floors that can be wiped; in no case they should be located in the area of children, sick persons and pregnant women! The use of professional filters can significantly reduce the emissions according to the UBA (German Federal Environmental Agency). According to the BAuA (Federal Agency for Occupational Health and Medicine) products that visibly emit toner dust have immediately to be removed from the working area. In addition to the information sheet “Toner dust at the working place”, the BAuA still advises people with allergies to metals to avoid any exposition. This concerns 20% of the population. Industrial physicians shall find feasible solutions. From 2013, the “Blue Angel” will finally limit also ultra-fine particles. According to the UBA, three machines out of four will not fulfill the guidelines.
- Please report dangerous products to [www.icsms.de](http://www.icsms.de).

### Change of trend: Ink instead of toner!

World leader HP announced in Germany in 2008: “Clever businessmen print with ink.” Actually, a long time ago modern inkjet printers started to be a powerful, low-current, low-emission and even more cost-effective alternative. HP is advertising: “Save up to 50% vs. cost of laser.” Even a permanent print and a 60-page colour print per minute are no longer a problem. As the first manufacturer, Epson announced the end of laser printers in five years.

### Dangerous pollution – serious consequences

- 94 % report the emission of toner
- 86 % are highly exposed, often to several machines and for decades
- 40 % get ill seriously or very seriously
- 25 % get incapable of working

nano-Control, online survey 2012

### Beware of toner!

**Don't breathe in toner! Toner not in children's hands!**  
**Avoid skin contact! Maintenance only by specialists.**  
**When changing toner please wear a face mask and protective gloves. Should you have conspicuous disorders like a sore throat, cough, inflammation of eyes and skin, please see a doctor!**