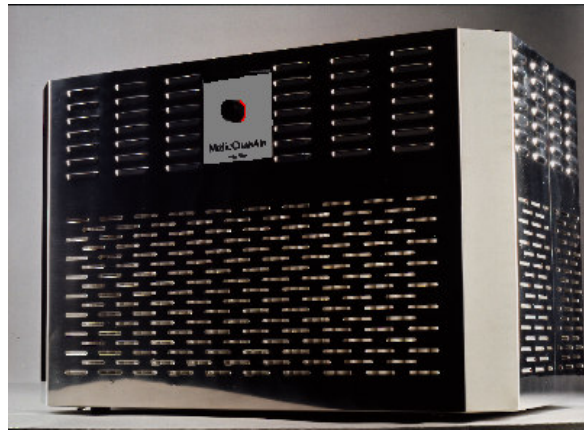


PROTECTIVE MEASURE

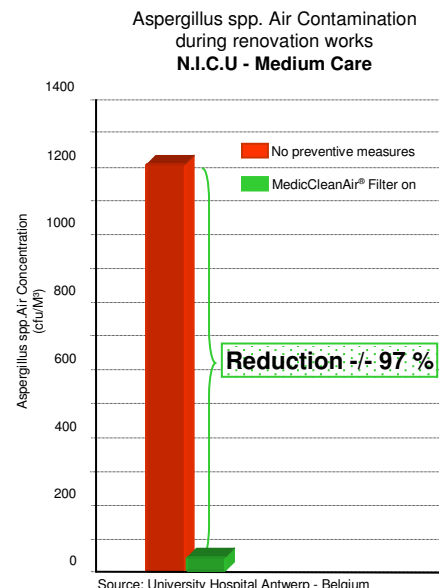
MedicCleanAir®

- Swiss MADE -

Reduces airborne infections
in
the healthcare environment



Safety in Healthcare



Something in the Air

Airborne Contamination

Increasing air pollution combined with the rising number of patients with immune system deficiencies has become a serious problem. There is a huge price to pay for airborne infections, both in terms of human life and financial costs. Consequently there is a general need to ensure that the air in the hospital environment - in all parts of the facility - is of the highest possible quality.

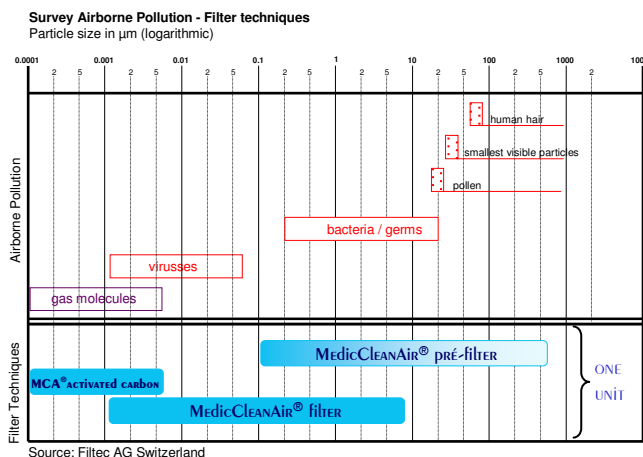
Medically controlled air is the only reliable solution as this eliminates the airborne contamination.

The 2 types of airborne contamination are

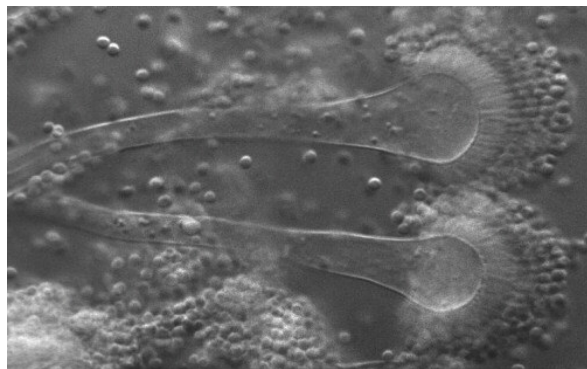
- Gases and chemical compounds.
- Particles.

To achieve effective air-cleaning a considerable number of requirements have to be met. The most important being an effective filter-cartridge, an optimum airflow, a total device of highest standard and all this tested under laboratory as well as under regular working conditions. Last but not least the results should have been of a standard that they have been published by recognised independent medical institutions such as the Hospital Infection Society. MedicCleanAir® Pro, meets all these requirements.

Scheme - Airborne Contamination



Airborne Hospital Infections



Aspergillus Spores

Airborne infections are an increasingly important factor in the growing problem of Hospital Acquired Infections.

Scientific publications from all over the world come to the same general conclusions:

- tremendous social and human losses
- a large drain on all healthcare resources.

Air is a major "transporter" of 'Hospital Acquired Infections' such as Measles, Chicken pox, Aspergillus and Tuberculosis.

Airborne infections are not limited to 'the sources' of contamination. This contamination is spread by the air from one 'source/area' to other areas causing cross contaminated departments with the result that sometimes entire hospital floors have to be closed.

- Aspergillus (for instance) travel long distances.

These are the most dangerous aspects of airborne infections:

- they are invisible, colourless and odourless (no warning)
- easy to acquire through inhalation
- survive for long periods (as research shows).

The increasing problem

The consequences and the development of airborne infections are considerable.

The numbers of airborne infections have increased significantly.

The reasons are:

- frequent and increased environmental contamination that is transported by air from the outside into the hospital.
 - frequent and increasing movement inside the hospital
- This equates the 'risk' for patients and hospital staff.
- more and more patients are immuno-compromised
 - multi resistant species develop rapidly
 - patients and hospital staff encounter new varieties.

The consequences of these developments are obvious.

- a high mortality through airborne infections
- high costs caused by airborne infections

It is estimated that in Europe the annual cost caused by airborne infections is over £ 7.000.000 per 1000 beds.

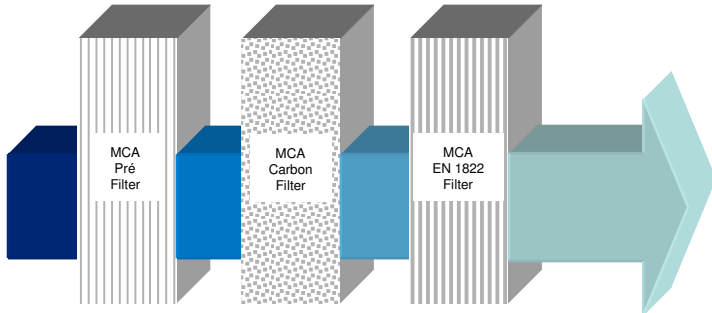
The cost for one aspergillus-infected patient is over £ 6.000

Apart from the above there are other aspects that should be considered such as:

- excessive occupation of hospital beds - 25 % of all ICU patients are affected
- increased extra workload for hospital staff
- the social impact for individuals and the financial impact on society.



MedicCleanAir® protects those most at risk.



Airborne infections are neither limited to certain sources nor boundaries. There are a huge number of potential sources of infection ranging from outside air to defective ventilating systems to people be they staff, visitors or patients.

Traditional methods for avoiding the spread of airborne infections in hospitals were of limited use and difficult to enforce. Even when high risk-activities like renovations were planned and preventive measures were taken, these were either unpractical, like sealing or economically unfeasible, like closing departments.

Particularly susceptible to airborne infections are patients that are immuno-compromised such as ICU, Neonates, Burn, Transplant and Cancer patients.

MedicCleanAir® has developed the first mobile air cleaner that reduces the risk of airborne infections in hospitals and medical centres. The revolutionary MedicCleanAir Pro® has been proven to reduce airborne infections by more than 70 % in Intensive Care Units already equipped with Hepa filtered circuits, by more than 80 % in High Care Area's and by more than 90 % in other departments.

These MedicCleanAir® results were achieved under 'extreme' conditions - during renovation works. The effectiveness of this unique preventive measure under 'regular' conditions is obvious.

MedicCleanAir® effective air cleaning.

Under severe conditions / renovation

Aspergillus spp. Air Contamination during renovation works N.I.C.U. University Hospital Anwerpen.

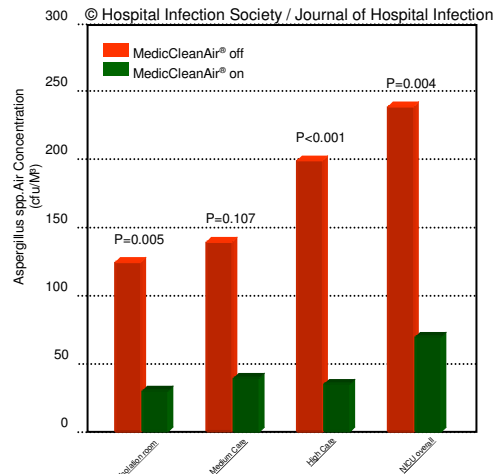
Renovation works are well known for creating, high risk airborne infections. There is an unavoidable increase in the circulation of dust, which is an excellent vehicle for transporting aspergillus. Adjacent graphics shows figures during a 10 months renovation in the N.I.C.U. equipped with a closed HEPA filtered circuit.

Known preventive measures, like installation of physical barriers, were taken to limit the airborne pollution (including Aspergillus).

■ - Aspergillus spp. concentration with common preventive measures.

Despite these precautions taken by hospital staff, the measured concentrations were to high and MedicCleanAir® was installed.

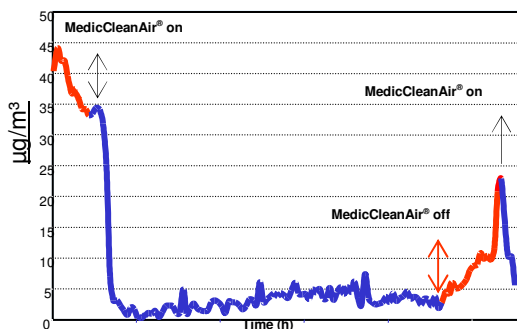
■ - Aspergillus spp. concentration with MedicCleanAir® installed.



Under 'regular' condition

MedicCleanAir® efficiency on all particle sizes.

Room - 3 x 5 x 3 = 45 m³
- from 28.01.2000 / 31.01.2000



*Extensive scientific research and test data are available on particles as well as on gases and chemical compounds.

Mission Statement.

The mission of MedicCleanAir® is to be at the forefront in the elimination of all airborne contamination.

This mission must be accomplished under 'severe' as well as under 'regular' conditions.

The technical features of the unit have to meet all maximum standards. The basis for MedicCleanAir® is the decrease of problems caused by airborne contamination.

Particles

Size of Aspergillus approx. 2 micron

Particle Size (µm)	Particles Input / cm ³	Particles Output / cm ³	Efficiency in %
0,017	37.561	0.276	99.27
0,019	40.175	0.253	99.37
0,029	68.550	0.273	99.60
0,039	80.355	0.848	98.94
0,045	78.039	0.845	98.92
0,060	93.001	1.594	98.29
0,070	94.933	1.198	98.74
0,093	124.092	0	100.00
0,107	135.580	0	100.00
0,124	157.160	0.134	99.91
0,255	76.180	0	100.00
0,340	24.427	0	100.00
0,392	12.040	0	100.00

Effective Air-Cleaning at the source

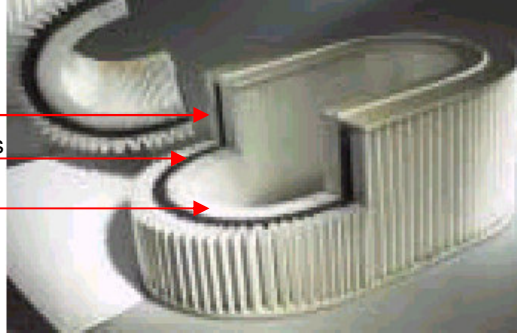
MedicCleanAir® Filter system

- Individual leak-test
- HEPA 14 SN EN 1822
- 3 filter system

Particles > 1 µm

Gasses & Chemical compounds

Particles < 1 µm



MedicCleanAir® - Filter cartridge

MedicCleanAir® Pro

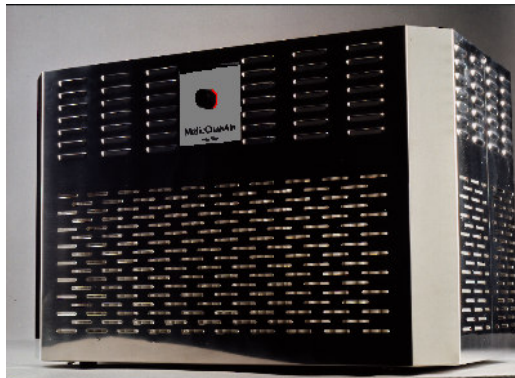
MedicCleanAir® Pro fulfils requirements that makes it ideal for use in hospitals and medical centres.

- Rapid to deploy in case of risk of contamination.
- Once deployed, maintains integrity of air quality.
- Safe to use in high care areas.
- Efficiently removes all airborne contamination.
- 4 user controlled levels of air-cleaning capacity, from 60 to 250 M³/hour.
- High capacity together with a 360-degree air in- and outlet allows quick decontamination and maintains optimum air quality.
- Easy to use and 24-hour work capability.
- No side affects due to the unique mechanical filter-techniques.
- Extremely energy efficient - less than common light bulb ! (between 32 and 72 Watts per hour).
- Infection control friendly - stainless steel casing ensures easy cleaning.
- Independently verified by leading scientific institutes with a growing number of publications on its efficiency.

Technical Details

Swiss Made
Installation: mobile
Measurements: 56Lx37Hx33D cm
Weight: 14 kg.
Capacity: from 60 to 250 M³/h
Voltage: 220-240 Volts
Casing: stainless steel
Safety Class I
CE
ISO 9001
ISO 14001

MedicCleanAir® PRO



MedicCleanAir®

c/o Walsberghe nv
Melkmarkt 35

B - 2000 Antwerpen

Tel.+.32.3.8607060

Fax.+.32.3.8607069

E-mail. info@mediccleanair.com

URL. www.mediccleanair.com

MedicCleanAir®