

DANGERS AND HAZARDS IN THE LASER SURGERY



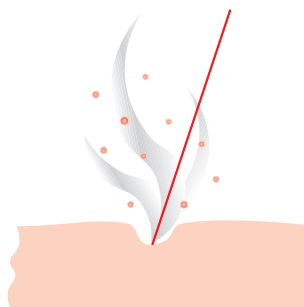
Up to 25% of the respiratory is passing the facemask!

FACEMASK DOESN'T OFFER ADEQUATE PROTECTION

The surgery facemask doesn't offer protection in front of air-supported particles. It was developed around the patient to protect him from an airborne infection by the operation staff.

In the laser surgery aerosols will be generated with a particle size of $0,1\mu - 10\mu\text{m}$. Those laser aerosols (LGAC = Laser Generated airborne Contaminants) consist of several parts of human fabric. This one being removed from the fabric explosively as a steam or gas mixture. Dangers start out from microorganisms like **bacteria**, **viruses** and **fungi**. These have a particle size of smaller than $2\mu\text{m}$ and can be completely breathing in and therefore are deposited in the lungs.

There is an acute infection risk with that for the operating staff.



Explosive distribution of the dangerous particles

TBH EXTRACTION AND FILTRATION SYSTEMS MEANS...

- ▶ protecting the patient and the operation-team
- ▶ view hindering smoke is removed, optimal view for the medic
- ▶ odors are eliminated due to the active carbon filter

THE SYSTEMS ARE USED IN THE APPLICATION FIELD OF...

- ▶ cosmetic surgery
 - skin redurfacing
 - hair removal
 - epiderm skin changes
- ▶ HF surgery
- ▶ dental medicin
- ▶ endoscopy

