

# Masken helfen

Dank an Richard Feuerbach [https://twitter.com/R\\_Feuerbach](https://twitter.com/R_Feuerbach)

Bitte irgendein Wissenschaftler dies zu widerlegen oder zu bezeugen:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2493952/pdf/annrcse01509-0009.pdf>

## Discussion

A review of the very considerable literature on prevention of infection in theatre shows a heavy bias in favour of history and hypothesis. Most of the facts relate to contamination, not infection.

The effectiveness of a mask in reducing contamination varies with the mask's shape, the materials of which it is made, and the way it is worn (10–11). While it has been shown that facial movements behind a mask can increase wound contamination (12), it has not been shown that wearing a mask makes very much difference to the contamination of the theatre environment (13) or that the number of airborne bacteria can in any way be correlated with wound infection (14,15). It would appear that minimum contamination can best be achieved

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<https://pubmed.ncbi.nlm.nih.gov/1157412/>

### Abstract

The microbiological counts were determined in an operating room suite of 8 rooms and a hallway. The bacterial counts in an empty operating room jumped statistically from 13 CFU/ft<sup>2</sup>/hr (+/- 31) to 24.8 (+/- 58.8) when the doors were left open (people in the hallways) and 447.3 (+/- 186.7) when 5 people were introduced. The wearing of a surgical face mask had no effect upon the overall operating room environmental contamination and probably work only to redirect the projectile effect of talking and breathing. People are the major source of environmental contamination in the operating room.

<https://europepmc.org/article/med/7379387>

## Abstract

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To examine the efficacy of currently used synthetic-fiber disposable face masks in protecting wounds from contamination, human albumin microspheres were employed as "tracer particles," and applied to the interior of the face mask during 20 operations. At the termination of each operation, wound irrigates were examined under the microscope. Particle contamination of the wound was demonstrated in all experiments. Since the microspheres were not identified on the exterior of these face masks, they must have escaped around the mask edges and found their way into the wound. The wearing of the mask beneath the headgear curtails this route of contamination.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/ccd.1810170306>

## Abstract

Although cardiac catheterization-related infections are rare, caps and masks are often worn to minimize this complication. However, documentation of the value of caps and masks for this purpose is lacking. We, therefore, prospectively evaluated the experience of 504 patients undergoing percutaneous left heart catheterization, seeking evidence of a relationship between whether caps and/or masks were worn by the operators and the incidence of infection. No infections were found in any patient, regardless of whether a cap or mask was used. Thus, we found no evidence that caps or masks need to be worn during percutaneous cardiac catheterization.

<https://journals.sagepub.com/doi/pdf/10.1177/0310057X0102900402>

1970s, there was a re-examination of sterile procedures, the need for aseptic practice, and the need for improvement in surgical suite air conditioning. **Filter-type masks were found to be ineffective in reducing overall airborne contamination.** Widespread use of ultraviolet light resulted in a reduction in airborne contamination, but had no effect on the incidence of postoperative wound infection. Laminar

<https://europepmc.org/article/med/11760479>

Airborne culturable bacteria were sampled over the operation field, on the anaesthetic side of the surgical curtain, as well as 10 cm before and to the side of the patients mouth. RESULTS:At all 4 locations there were no significant differences in the number of CFUs between patients wearing a SFM or not (e.g. over the operation field: patient with SFM 5.5 +/- 1.1; no SFM 4.8 +/- 1.2; mean +/- SEM). Significantly more CFUs were detected in patients undergoing general anaesthesia ( $p < 0.05$ ). The extent of the operation did not correlate with the number of CFUs; however, we observed a trend that more CFUs were detected with an increasing number of persons working in the operating room. CONCLUSION:Surgical face masks worn by patients during regional anaesthesia, did not reduce the concentration of airborne bacteria over the operation field in our study. Thus they are dispensable. A higher airborne germ concentration has been detected in patients during general anaesthesia. The reasons for this finding are unknown, but it may be discussed as being a result of a higher activity and number of staff involved during general anaesthesia causing more air turbulence.

<https://www.semanticscholar.org/paper/Does-evidence-based-medicine-support-the-of-in-in-Bahli/751acd427c20c8dc7d1fbc1b45eead104286f481>

#### RESULTS

No significance difference in the incidence of postoperative wound infection was observed between masks group and groups operated with no masks (1.34, 95% CI, 0.58-3.07). There was no increase in infection rate in 1980 when masks were discarded. In fact there was significant decrease in infection rate ( $p < 0.05$ ).

<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1445-2197.2009.05200.x>

**Conclusion:** Surgical site infection rates did not increase when non-scrubbed operating room personnel did not wear a face mask.

<https://europepmc.org/article/med/25294675>

## Abstract

This article clarifies the use of surgical masks during surgery and the evidence for this. A search performed in PubMed found four studies based on 6.006 patients. The studies described the use of surgical masks in surgery with post-operative infections as endpoint, and the studies had to include a control group. None of the four studies found a difference in the number of post-operative infections whether you used a surgical mask or not. However, the limited numbers of studies make it unsafe to conclude whether or not surgical face masks reduce post-operative infections.

<https://journals.sagepub.com/doi/pdf/10.1177/0141076815583167>

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[https://wwwnc.cdc.gov/eid/article/26/5/19-0994\\_article](https://wwwnc.cdc.gov/eid/article/26/5/19-0994_article)

<https://www.cebm.net/covid-19/masking-lack-of-evidence-with-politics/>

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<https://web.archive.org/web/20200510161346/https://www.uea.ac.uk/about/-/new-study-reveals-blueprint-for-getting-out-of-covid-19-lockdown>

<https://jamanetwork.com/journals/jama/fullarticle/2749214>

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[https://files.fast.ai/papers/masks\\_lit\\_review.pdf](https://files.fast.ai/papers/masks_lit_review.pdf)

<https://www.medrxiv.org/content/10.1101/2020.04.01.20049528v1>

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<https://aaqr.org/articles/aaqr-13-06-0a-0201.pdf>

<https://www.primarydoctor.org/masks-not-effect>

<https://mediatum.ub.tum.de/602557>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4420971/>

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31142-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext)

<https://royalsociety.org/-/media/policy/projects/set-c/set-c-facemasks.pdf>

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<https://web.archive.org/web/20200509230932/https://www.oralhealthgroup.com/features/face-masks-dont-work-revealing-review/>