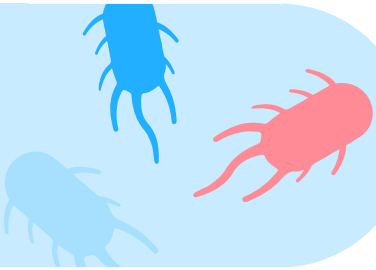
Contamination and Infection Control

SCIENTIFIC EVIDENCE RELATED TO SINGLE-USE BRONCHOSCOPES

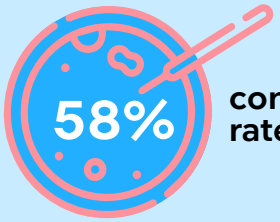
Mehta & Muscarella (2019)

Bronchoscopes may pose an underrecognized potential risk for transmission of Carbapenem-resistant Enterobacteriaceae (CRE) and related Multi-drug resistant organisms. Cases suggest that high-level disinfection of bronchoscopes performed in accordance with guidelines may not be effective in eliminating the risk of CRE transmission from one patient to another. Damaged bronchoscopes increase the risk.



Ofstead et al. (2018)

Microbial growth was found in 14/24 fully reprocessed bronchoscopes (58%). After manual cleaning, 100% of bronchoscopes had residual contamination. Microbial growth was found in 14/24 fully reprocessed bronchoscopes (58%), including mold, Stenotrophomonas maltophilia, and Escherichia coli/Shigella species.



contamination rate

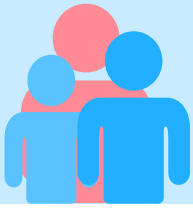
Gavaldà et al. (2015)

A total of 620 samples were obtained, 56 samples (9%) tested positive for at least one specimen. Of the 56 positive samples, 37 (6.0%) corresponded to alert level 1, 10 (1.6%) corresponded to alert level 2 and 9 (1.4%) corresponded to alert level 3.

9%
contamination rate

Kovaleva et al. (2013)

Out of 482 patients, 90 patients showed symptoms of infection (18.7%) following bronchoscopy. Most of the infections were linked directly to a bronchoscope which in most cases caused pneumonia.



20.21%
of contaminated patients show symptoms of infection

Mouritsen et al. (2019)

Reusable flexible bronchoscopes (RFBs) entail a risk of patient contamination of 15.3% and results in additional per procedure costs. **aScope Broncho costs €332 less per procedure than RFBs. Taking the patient contamination risk into consideration, aScope™ 4 Broncho is cost-effective compared to RFBs.**

Reusable procedure cost
= £511

Infection risk
=2.8%

Ambu