

DISINFECTANT WIPES ARE APPROPRIATE TO CONTROL INFECTION: OXIVIR TB SHOWS SUPERIORITY

Study by Sattar and others (JHI, 2015)

Summary:

All the disinfectant wipes tested achieved a $>4 \log_{10}$ ($>99.99\%$) reduction in *Staphylococcus aureus* & *Acinetobacter baumannii* within 10 seconds of wiping. But only Oxivir prevented the transfer of bacteria to another surface.

In this mathematically driven microbiological study, the efficacy of 5 different disinfectant wipes was measured. High-touch environmental surfaces (HTES) close to the patient were cultured. The bioload was transferred to sterile discs and those were wiped then measured.

The wipes compared in the study were:

1. 0.5% AHP (Oxivir Tb)
2. 0.45% dual quat
3. 50% sodium percarbonate with citric acid
4. 3% sodium hypochlorite (1000ppm bleach)
5. 20% isopropyl alcohol with ethanol and 0.125% triple quat

The study found that one wipe is often used to wipe multiple surfaces. That increase the risk of picking up micro-organisms on a dirty surface and depositing them on a clean surface elsewhere.

Every single wipe tested was efficacious and achieved a $4 \log_{10}$ microbe reduction (which is the global standard for disinfection efficacy). But four of them re-deposited the microbes elsewhere, which means the product in the wipe did not kill the microbes immediately.

Only one wipe – Oxivir Tb – did not release microbes elsewhere, demonstrating that AHP kills the microbes almost instantly. With the increasing demands on the time of cleaners and nurses, Oxivir Tb wipes are appropriate for placement near the beds of patients to ensure regular disinfection of high-touch surfaces on or near the bed.