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PATIENT NEAR ENVIRONMENT – STATE OF THE ART DISINFECTANTS – A VIEW ON LATEST STUDIES
PATIENT NEAR ENVIRONMENT

Point of transmission
- High-touch surfaces: bedside rails, bedside tables and the patient himself\(^1\)

Hand- and surface disinfection
- Efficacy
- Benefit/risk ratio
- Availability, visibility, convenience

\(^1\)Cheng V.C.C. et al: Hand-touch contact assessment of high-touch and mutual-touch surfaces among healthcare workers, patients, and visitors. Journal of Hospital Infection 2015, 90: 220-225
INTRODUCTION

DISINFECTANTS AND NEW STUDY RESULTS...

YOU ALWAYS HAVE THE CHOICE!
EXAMPLES OF NEW STUDIES I SHOW YOU TODAY…

…DID CREATE BENEFIT FOR PATIENTS AND HEALTHCARE PERSONAL
REMANENT ACTIVE INGREDIENTS
REMANENT ACTIVE INGREDIENTS

REMANENT ACTIVE INGREDIENTS IN HAND DISINFECTANTS

Remember perfumes and colourants?

Benefit/risk ratio:
no benefit, but a small risk of creating allergies
Remanent active ingredients are agents that remain on the skin of the hands after the alcohol has been evaporated.
“Alcohol-based formulations should be used for **hygienic** hand disinfection [Cat. IB].

Products with additional remanent active ingredients are not recommendable, since they don’t lead to an improved efficacy, but elevate the risk of side effects [Cat. II].”

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NO PROVEN BENEFIT
2016: New KRINKO-guideline
Hand hygiene in healthcare institutions

“Alcohol-based formulations should be used for surgical hand disinfection [Cat. IB]..."

No recommendation can be currently given on the use of products with additional remanent active ingredients, since the benefit-risk-assessment is open.”[1]

REMANENT ACTIVE INGREDIENTS

REVIEW 2016

Evaluation of published data

• Products containing CHG, MES and OPP were evaluated
• No effect on efficacy

No benefit

Kampf G et al.: Lack of sustained efficacy for alcohol-based surgical hand rubs containing ‘residual active ingredients’ according to EN 12791. JHI 2017; 95: 163-168
Lack of antimicrobial efficacy of mecetronium etilsulfate in propanol-based hand rubs for surgical hand disinfection

G. Kampf

REMANENT ACTIVE INGREDIENTS

DIRECT COMPARISON WITH/WITHOUT MES[1]

No difference in efficacy – no benefit[2]

No difference in efficacy – no benefit[2]

[1] MES: mecetronium etilsulfate, a commonly used remanent active ingredient

STATE OF THE ART HAND DISINFECTANTS ARE

WITHOUT PERFUME

WITHOUT COLOURANT

WITHOUT REMANENT ACTIVE INGREDIENTS
DISPENSERS
VISIBILITY AND ACCESSABILITY MATTERS

Signal coloured dispensers improve compliance\cite{1}

Visible placement in patient near environment improves compliance\cite{2}

\cite{1}Scheithauer S. at al., Influence of signal colored hand disinfectant dispensers on hand hygiene compliance at a medical intensive care unit, Am. J. Infect. Control. 2014 Aug; 42(8):926-8


Picture, source: with friendly permission of Lohmann & Rauscher International GmbH & Co. KG
STATE OF THE ART DISPENSERS FOR DISINFECTANTS ARE:

VISIBLE

PLACED AT THE POINT OF CARE
REUSABLE WIPE DISPENSERS
66 dispensers from 15 different healthcare facilities were collected

- 28 dispensers from nine hospitals contaminated (Achromobacter, Serratia) [1]

Reprocessing of dispensers difficult due to

- biofilms

- automated procedures (60°C/5 min) [2]


CONTAMINATED REUSABLE TISSUE DISPENSERS

REUSABLE WIPE DISPENSERS – NOT RECOMMENDED FOR HIGH RISK AREAS

VAH recommendation 2014 [1]

- VAH-Verbund für Angewandte Hygiene, an independent German association of scientists, also editor of a list of certified disinfectants “VAH-List”

CONTAMINATED REUSABLE TISSUE DISPENSERS

STATE OF THE ART SURFACE DISINFECTANTS IN DISPENSERS ARE SINGLE-USE READY-TO-USE

No refill bags, no dilution process of concentrate, no reprocessing, no dilutions in sewage system, „dry“ waste going to incenerator
READY-TO-USE FLOW PACKS
READY-TO-USE WIPES INCREASINGLY IMPORTANT IN HEALTH CARE

Annual net sales in German hospitals
20 Mio. €, growth rate >25%
(concentrates 9 Mio. €) [1]

Flow packs widely used

4-Field-test (EN16615) new efficacy standard[2]

[1] IMS DKB Krankenhaus-Sachbedarfsstudie 1Q. 2018, with friendly permission of IQVIA Hospital Services

[2] DIN. Chemische Desinfektionsmittel und Antiseptika - Quantitatives Prüfverfahren zur Bestimmung der bakteriziden und levuroziden Wirkung auf nicht-porösen Oberflächen mit mechanischer Einwirkung mit Hilfe von Tüchern im humanmedizinischen Bereich (4-Felder-Test) - Prüfverfahren und Anforderungen (Phase 2, Stufe 2); Deutsche Fassung EN 16615:2015
sufficient volume necessary to ensure bactericidal efficacy (according to EN 16615)

Example 1:
Low soaking volume results in lack of efficacy[1]
Specific example in publication:
lower limit at approx. 4g liquid/wipe

Example 2:
EN 16615 volume per standard tissue


QUALITY READY-TO-USE DISINFECTION WIPES

FLOW PACKS WITH 60 WIPES OR LESS ARE SOAKED MORE EVENLY

microbiological results suggest that the products thus also become safer in terms of microbiological efficacy[1]

QUALITY READY-TO-USE DISINFECTION WIPES

STATE OF THE ART READY-TO-USE FLOW PACKS

FIRST TISSUES MOIST AND WITH PROVEN EFFICACY

60 TISSUES PER UNIT SEEMS TO BE AN UPPER LIMIT
HAND DISINFECTANTS: NO REMANENT ACTIVES

DISPENSERS: VISIBLE & AT THE POINT OF CARE

SURFACE DISINFECTANTS: READY-TO-USE, SINGLE-USE

FLOW PACKS: PROVEN EFFICACY OF FIRST TISSUES
Hygiene is a lifetime passion

If you have been seriously bitten by this virus, it will never let you go.

Because you have found something, where you can make things a little better every day as part of a worldwide community.

Many thanks to the to give us a platform to share and improve!