



Sterillium® med and Sterillium® pure fulfill EN 1500 in 15 seconds

Background

The efficacy of alcohol-based hand rubs (ABHRs) is evaluated using test norms such as EN 1500 for hygienic hand disinfection. For an ABHR to pass EN 1500, it must reproducibly inactivate bacteria on the hands of volunteers at least as effectively as a reference alcohol.

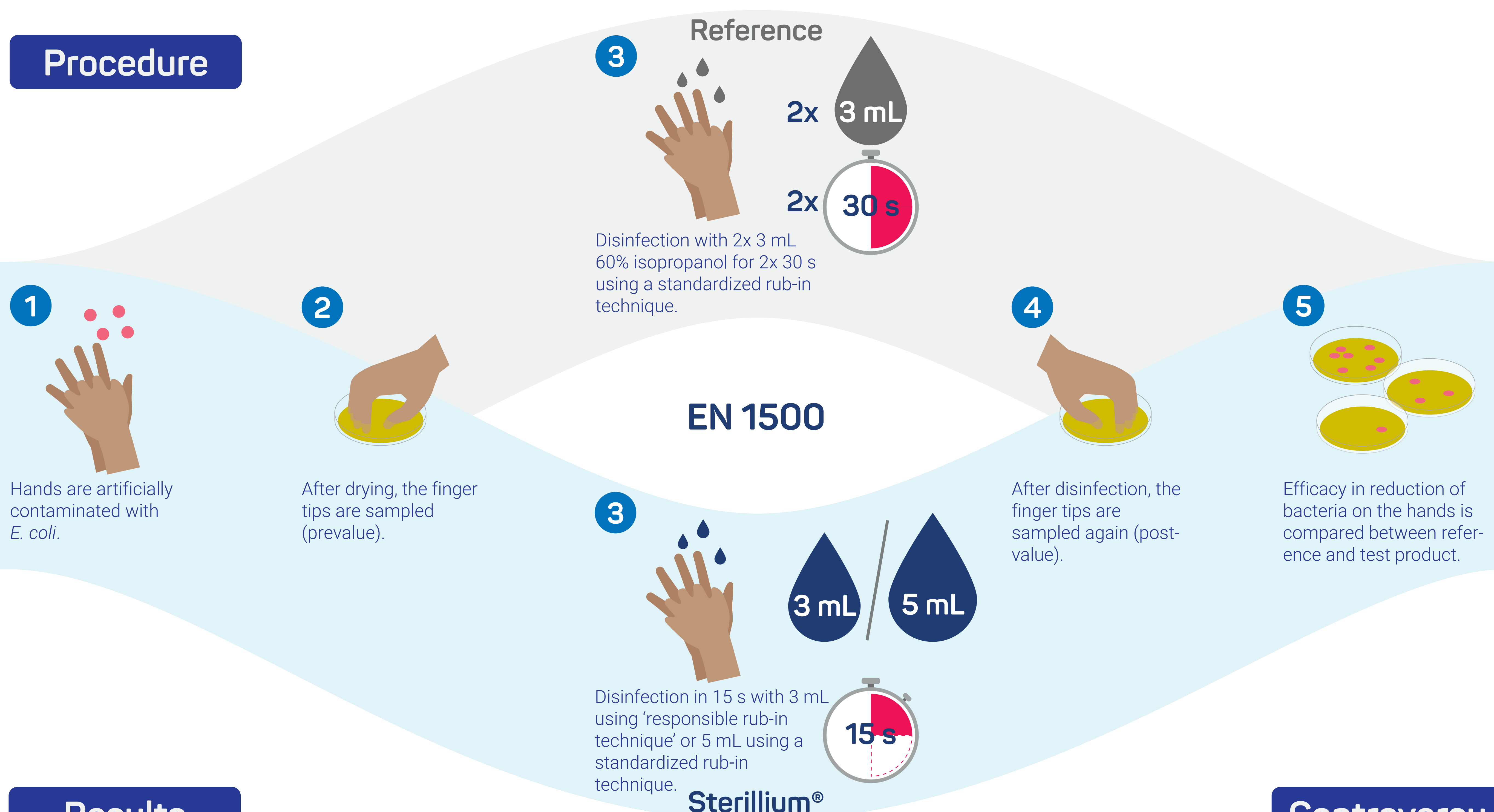
As these norms form the basis of claims, they influence recommendations and use of ABHRs in clinical practice. For example, a minimum 'rub-in' time of 30 seconds is often recommended in practice, as ABHRs are tested for at least 30 seconds in accordance with EN 1500.

However, long rub-in times are often seen as a barrier to hand hygiene, resulting in healthcare workers skipping necessary disinfections to save time. In fact, studies where rub-in times have been reduced in practice show an increased frequency of hand disinfection [1].

However, studies investigating efficacy with shortened applications are often based on modified reference procedures, making it difficult to claim sufficient efficacy [2].

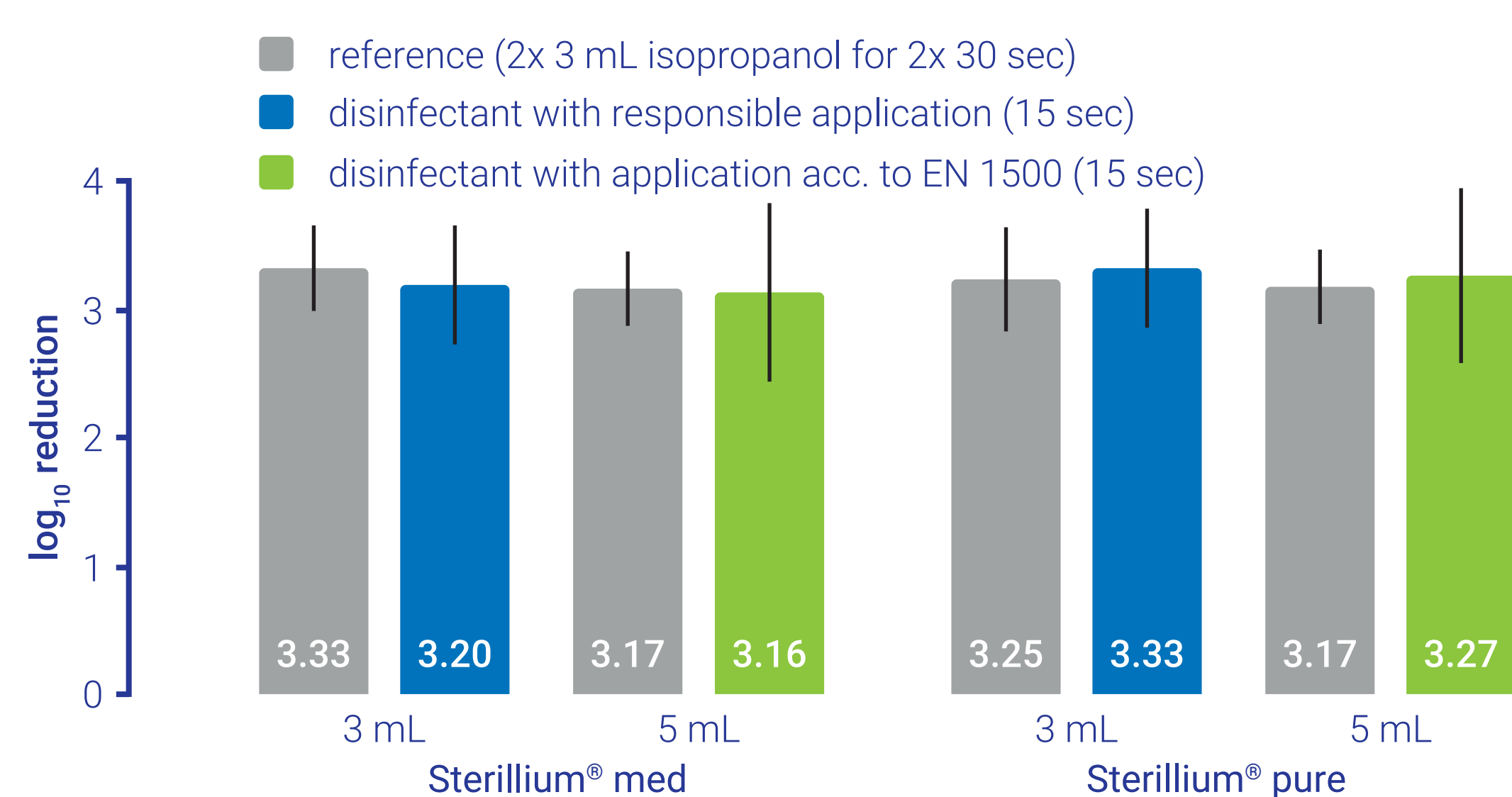
It was investigated, whether Sterillium® med and Sterillium® pure can meet the unmodified efficacy requirements of EN 1500 in 15 seconds instead of 30 seconds [3].

Procedure



Results

Sterillium® med and Sterillium® pure reduced the microbial load on the fingers of 20 volunteers similarly to the unmodified reference, both with the rub-in technique described in EN 1500 and with the so-called "responsible rub-in technique". The latter has no specific order or steps. It only requires that the hands should be completely covered, focusing on the fingertips and thumbs [4]. Both ABHRs therefore meet the unmodified efficacy requirements of EN 1500 in 15 seconds.



Controversy

While an increasing number of guidelines recommend 15-second application times, such as the US SHEA, which considers 15 seconds to be the minimum to achieve full coverage of the hands [5], not everyone supports a reduction from 30 seconds to 15 seconds. Reasons range from concerns that healthcare workers will spend even less time on hand disinfection to concerns about inadequate hand coverage, to the fact that EN 1500 currently does not support tests of less than 30 seconds.

Either way, in the end everyone agrees that no compromises should be made when it comes to patient safety.

Conclusion

Both ethanolic Sterillium® med and propanolic Sterillium® pure meet the efficacy requirements for hygienic hand disinfection according to EN 1500 in 15 seconds.

References

- Kramer *et al.* (2017) Shortening the application time of alcohol-based hand rubs to 15 seconds may improve the frequency of hand antiseptics actions in a neonatal intensive care unit. *Infect Control Hosp Epidemiol.* 38:1430-1434
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- Mönch *et al.* (2024) Alcohol-based hand rubs can fulfil efficacy requirements of EN 1500 in 15 seconds. *GMS Hyg Infect Control* 19:Doc41
- Kampf G *et al.* (2008) Influence of rub-in technique on required application time and hand coverage in hygienic hand disinfection. *BMC Infect Dis* 8:149
- Głowicz JB *et al.* (2023) SHEA/IDSA/APIC Practice Recommendation: Strategies to prevent healthcare-associated infections through hand hygiene: 2022 Update. *Infect Control Hosp Epidemiol* 44:355-376



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Use hand disinfectants safely.
Always read the label and product information before use.