

Notification by the Disinfectants Commission of the German Association of Applied Hygiene (VAH)



## Recommendation for selection of sporicidal disinfectants against *Clostridium difficile* infections in human medicine

**C**lostridium difficile infections (CDIs) necessitate the use of sporicidal disinfectants to effectively inactivate any endospores also present and interrupt the infection chain. But the difficulty is in selecting a suitable disinfectant with proven sporicidal efficacy since to date there are no approved and harmonized test methods available to that effect. Therefore, current declarations of sporicidal efficacy are based on existing EN standards regulating other application areas, which through extensive changes have been adapted to sporicidal efficacy testing in human medicine. This gives rise to the problem that when evaluating sporicidal products there is frequent variation between products with regard to spore enrichment, test organisms (strain) used, baseline suspension and sensitivity of spores, challenge substances and required reduction rates which, consequently, does not permit comparability or appropriate efficacy testing.

The October issue of Hygiene & Medizin 2016 / Infection Control and Healthcare (HygMed 2016; 41(10): 271) published an approved test method for sporicidal effica-

cy testing against *C. difficile* spores drawn up by the VAH Disinfectants Commission and the 4+4 Working Group, reflecting the current state of knowledge. In parallel, the same method was submitted to the enquiry process at CEN TC 216 as Work Item (WI) 216068, status 2017-01.

For *C. difficile* infection prophylaxis the Disinfectants Commission recommends the use of sporicidal disinfectants whose sporicidal properties have been tested with at least VAH method 18 or Work Item 216068, status 2017-01. For wipe impregnation systems the impregnation solution, and for ready-to-use wipe systems the expressed impregnation solution, should be tested with the aforementioned test methods, while observing the disinfectant stability in both cases.

For routine disinfection of rooms accommodating CDI patients the Disinfectants Commission recommends daily surface disinfection with a product with proven sporicidal efficacy, in at least a bactericidal/levuricidal concentration-time relationship. The reason put forward for that was that often patients were unable to tolerate the disinfectant substance as used

in the sporicidal concentration-time relationship when patient persons are present in the room.

However, for terminal disinfection or in outbreak settings the sporicidal concentration-time relationships of a product's with proven sporicidal efficacy must always be used.

The VAH Disinfectants Commission and die 4+4 Working Group are also currently developing a practice-oriented test method based on the 4-field test of VAH method 14.2 and EN 16616.

The VAH is also at present drawing up a list of such sporicidal products.

### References

1. Desinfektionsmittel-Kommission im VAH (Hrsg.). VAH-Methode 18 zur Prüfung der sporiziden Wirksamkeit gegenüber *C. difficile*. HygMed 2016; 41(10): 271.
2. Desinfektionsmittel-Kommission im VAH (Hrsg.). Anforderungen und Methoden zur VAH-Zertifizierung chemischer Desinfektionsverfahren. Stand 2. April 2015. 1. Ergänzung mit Stand Oktober 2016. Wiesbaden: mhp-Verlag.

Other VAH publications:  
[www.vah-online.de](http://www.vah-online.de)