

Summary of literature identified for the National Policy Guidance & Evidence (NPGE) literature reviews – January to March 2024

Titles and abstracts are reviewed for subject relevance. Additional exclusion criteria are also applied i.e. exclusion of laboratory focussed studies such as molecular typing etc.

Literature review	Papers identified	Summary of Findings	Impact on Recommendations
Hand Hygiene Products	<p>Leong Xin Yi, Regina Leong Zhi Ling, Lim Lai Huat et al.</p> <p>Analysis of Antimicrobial Activity Using Hand Sanitizers.</p> <p>Current Trends in Biotechnology and Pharmacy. 2023. 17(4A (Supplement)); pp.162–171.</p>	<p>This laboratory study aimed to test the efficacy of different alcohol-based hand sanitiser (ABHS) products against three clinically relevant bacterial isolates in line with ESEN 1040 guidelines. Products compared were oil-based ABHS (Brand A), non-oil-based ABHS (Brand B), ‘WHO formula’ (ethanol and isopropyl alcohol), 65% ethanol and 96% ethanol versus control. Isolates were <i>E. coli</i>, <i>S. aureus</i> and <i>S. cerevisiae</i> for tests of efficacy against Gram-negative bacteria, Gram-positive bacteria and fungi respectively.</p> <p>Minimum requirements of test microorganism reduction were met by all products, aside from 65% ethanol, following five minutes of contact. There was a trend of increased efficacy with</p>	<p>Adds to the evidence base for the following objectives:</p> <p>“Are there any legislative requirements and/or standards that hand hygiene products must adhere to?”</p> <p>Cited European Standards are not listed within current published literature review.</p> <p>“What are the minimum requirements for microbiological efficacy of hand hygiene products</p>

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		<p>prolonged exposure time. Efficacy following one minute of contact was deemed the closest to real-world application. Both Brand A and B were effective at reducing microbial growth of all test microorganisms following one minute of contact, with Brand B being the most effective. 96% ethanol and WHO-formulation were less effective against <i>S. aureus</i> and <i>S. cerevisiae</i> than <i>E. coli</i>. For <i>E. coli</i>, 5 log reductions, or 99.99% effectiveness, was observed for all products after one and five minutes of contact – aside from 65% ethanol.</p> <p>Limitations of this study include limited generalisability to real-world hand hygiene; other brands or composition of sanitiser; and other microorganism isolates, strains or species. This study and referenced standards are not focused on primarily clinical use of ABHS so it is unclear whether findings are sufficient for hand hygiene practices in healthcare. It is not reported whether the brands tested acted as contributors or funders of this project.</p>	<p>for health and care settings?”</p> <p>No change to recommendations.</p>

Evidence table – Healthcare Infection Incidents, Outbreaks and Data Exceedance - literature identified

Literature review	Papers identified	Summary of scientific findings	Impact on Recommendations
	No literature identified.		