

CASE STUDY

Health Care Without Harm Europe SAICM 2.0 Project: Promoting safer disinfectants in the health-care sector

Over 80 health providers from 19 countries

Assessment of hospitals' disinfectant ingredients, and their procurement and use, to provide recommendations for the safe substitution of harmful chemicals.

Goals and Objectives

The goal of this project is to promote the use of safer and more environmentally friendly disinfectants without compromising hygienic and occupational health standards.

The objective of this project is to reduce the emission of hazardous substances in the environment, thereby contributing to implementation of the WHO Chemicals Road Map and the United Nations Strategic Approach to International Chemicals Management (SAICM) process. These objectives can be achieved by:

- adjusting disinfectants purchasing criteria; and
- raising awareness and expanding the knowledge of purchasers about the negative health and environmental impacts of certain disinfectant ingredients, and the need for more careful use of disinfectants.



Project Overview

Context

Disinfectants are widely used in health-care settings – they are essential to prevent cross-contamination, outbreaks of diseases and hospital-acquired infections. However, the biocidal active substances that are so effective at disinfecting products, surfaces and skin also pose potential occupational health hazards and environmental threats, and can contribute to the spread of antimicrobial resistance (AMR). The health-care sector is uniquely positioned to play a leading role in promoting safer disinfection by demonstrating that high hygiene and infection prevention and control standards can be maintained while reducing the negative health and environmental impacts of the products used. Thanks to its purchasing power, the health-care sector can influence the disinfectants market by increasing the demand for safer and environmentally friendly products, thereby changing their composition.

Approach

Over 80 health-care providers from 19 countries were surveyed by Health Care Without Harm Europe about their awareness of disinfectant use and potential hazards, the policies and measures adopted to minimize such hazards, and whether these are reflected in their organizations' procurement practices. The hazard analysis investigated the environmental and health hazards of 172 disinfectants used by the project participants. Six selected hospitals from Brazil, Colombia, Germany, Iceland, South Africa and the United States of America received tailored support for identifying safer disinfectants, and the results of their journey are described in detailed case studies. A broad range of local, regional, national and international stakeholders were involved via a workshop, online meetings and public consultation to receive feedback on the project results and draft recommendations aimed at improving the regulatory framework for the use and procurement of disinfectants. We built capacity and raised awareness through facilitation of webinars, presentations at relevant conferences, and publications of articles, quick-procurement guides, a video and a final report containing suggestions for choosing disinfectants products and exploring systemic alternatives so as to reduce exposure to harmful chemicals, and highlighting current policy gaps and areas of improvement.

The project was financially supported by the Federal Ministry for the Environment; Nature Conservation; Nuclear Safety (BMU) Germany and the German Environment Agency (UBA); and the Swedish International Development Cooperation Agency (SIDA) and built on the Viennese Database for Disinfectants (WIDES).



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Results

- Thanks to the project and case studies, participating hospitals are now aware of international chemical classification systems – such as the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) – and can implement more careful practices in handling disinfectants.
- Extended knowledge was passed on to buyers and users on the occupational health and environmental impacts of disinfectants (with over 120 webinar participants, over 325 online views of the final report in four months, and 139 views of the video in three weeks).
- Hospitals and companies are more aware of the innovation needs in the health-care system for less harmful disinfectants.
- There were changes in purchasing criteria for disinfectants in the health-care sector.
- Companies received feedback on what innovation needs the health-care system requires to improve the environmental impact of disinfectants.

Lessons Learned

The survey results showed that there was little awareness about the GHS classification systems among the participants, suggesting that training in safer management of disinfectants handling and disposal would benefit users. Even though the majority of participating hospitals are aware of the potential hazards posed by disinfectants to human health and/or the environment, only 35% of them include sustainable procurement criteria in the overall procurement process, and half of them do not monitor their implementation. The decisive factors in the procurement of disinfectants remain the cost of the product and efficacy, followed by occupational health factors and the feedback from staff that is using the product. These, as well as the products' compatibility with other products and materials that are used, need to be considered when aiming to substitute potentially hazardous disinfectants with safer alternatives.

The final report of the project is available here: <https://noharm-europe.org/documents/promoting-safer-disinfectants-in-the-healthcare-sector>.

The case study was authored by Health Care Without Harm (HCWH) Europe. The named authors alone are responsible for the views expressed in this publication.

Recommendations

Increased efforts are needed to raise awareness of health issues among procurement officers and supply chain officials, and communicate hazards to ensure that procurers around the globe have access to information. Furthermore, testing of biocides and disinfectants needs to be increased and the information disclosed. In order to ensure sustainable use of biocides, users adhere to best practices so that they only use them when truly necessary (i.e. when there are no safer non-chemical or less hazardous alternatives).

Such adherence to best practices has been shown to be able to change the market for disinfectants by addressing the needs of hospitals and procurers to identify safer alternatives, improve regulations and policy frameworks, set criteria for sustainable procurement practices, encourage responsible business practices, and foster innovation in the field of sustainable disinfection practices.



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