

# ABSTRACT

**PRESENTER:** Jennifer Macary

**COMPANY:** Henkel

**JOB TITLE:** Principal Scientist

**Podium Title:** *The Advantage of Handwashing with Antibacterial Soap*

## **Background information (Short introduction)**

This talk will cover a brief history of FDA regulations pertaining to antibacterial hand wash products used in the US. The safety and efficacy of the antiseptic ingredients used in antibacterial (AB) hand soaps will be discussed, with specific focus on some of the new data demonstrating the benefits of antibacterial hand soap versus plain soap and water.

## **Objective**

The objective of this discussion is to discuss the new safety and efficacy data that has been generated on the antiseptic ingredients used in antibacterial soaps, as well as to provide background information on the history of antibacterial soaps.

## **Methodology**

Several studies have been conducted to demonstrate the safety and efficacy of antiseptic ingredients used in AB soaps. Specific tests that will be discussed include in-vitro Time Kill studies, in-vivo healthcare personnel handwash, in-vitro dermal penetration, in-vitro minimum inhibitory concentration studies, human pharmacokinetic maximum usage trial and finally the effectiveness of hand wash agents on controlling the transmission of pathogenic bacteria from hands to food.

## **Results**

The results of the studies presented provide new and further evidence on the safety and efficacy of antiseptic ingredients used in AB handwash products. Furthermore, data has been generated demonstrating why killing more germs using an AB handwash product is better than plain soap and water.

## **Conclusion**

Hand hygiene is one of the most important steps to avoid infection. Through many different in vitro and in vivo studies, we have demonstrated that antiseptic ingredients used in AB soaps are both safe and efficacious. Furthermore, while washing hands with soap and water can provide some reduction in bacteria, these new studies provide evidence that the reduction of bacteria on the hands following the use of soap containing an antibacterial ingredient can lead to a reduction in infection. While some continue to challenge the benefit of AB hand soaps, new data shows that in certain situations the use of AB handwashes could make a difference in both consumer and healthcare settings.

## Why is this important to the industry?

This year, focus on handwashing has been greater than ever, accompanied by some misinformation. In 2016, the FDA ruled that triclosan and 18 other antibacterial agents were not generally recognized as safe and effective. In the general public, this ruling has been distorted to a belief that all AB soaps are not safe nor effective. Therefore, this talk is important to share the science behind AB soaps and arm SCC members with data to make informed decisions.

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Jennifer Macary is a Principal Scientist in Beauty Care at Henkel, supporting upstream innovation. Before her current role, she was a Senior Scientist on the hand soap team supporting Dial. With an interest in personal care from a young age, Jennifer joined the cosmetic industry in 2010 after graduating with a Bachelor of Science degree in Chemistry from Northeastern University. Jennifer spent seven years with Momentive Performance Materials working in R&D and application development. During her time at Momentive, she attended Fairleigh Dickinson University and earned a graduate degree in Cosmetic Science. Jennifer is

an active member of the Society of Cosmetic Chemists and current chair of the Connecticut chapter.