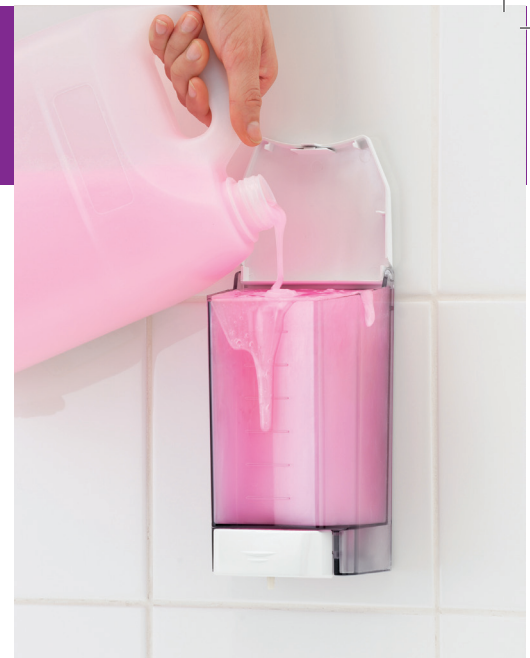


# HYGIENE FACTS

## Bulk fill liquid hand soap

**Research shows up to 1 in 4 bulk fill liquid soap dispensers contain dangerous levels of bacterial contamination.**

Washing hands with soap and water is a universally accepted method to reduce bacteria on the hands. However, a recent study conducted by the University of Arizona, USA has revealed that bulk fill (or refillable) liquid soap dispensers can create a suitable environment for the growth of potentially disease causing microorganisms.



### THE STUDY

The objective of the study was to determine the occurrence of heterotrophic (HPC) and coliform bacteria in liquid hand soaps collected from public restrooms across the United States. The liquid soap samples collected were from refillable dispensers.

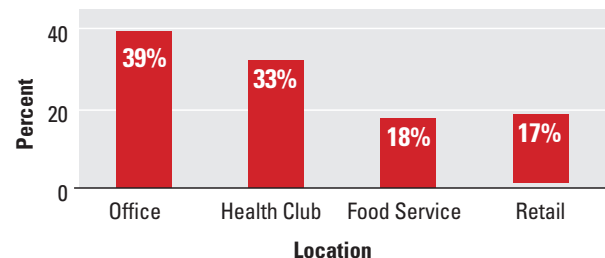
A total of 541 liquid soap samples, consisting of 428 from sink areas and 113 from showers, were analysed. Sample locations included public restrooms in restaurants, health clubs, office buildings and retail stores.

### THE RESULTS

TOTAL NUMBER OF SAMPLES FROM REFILLABLE SOAP DISPENSERS	NUMBER OF SAMPLES CONTAINING BACTERIA	BACTERIA DETECTED IN DISPENSERS THAT REQUIRED SEALED SOAP REPLACEMENTS
<b>541</b>	<b>133 (25%)</b>	<b>0</b>

- Of the 541 liquid soap samples taken from refillable dispensers, 133 (25%) contained high levels of bacteria.
- 65% of the bacteria was identified as coliforms, which are the bacteria abundant in the faeces of warm-blooded animals.
- No bacteria were detected in dispensers that required sealed soap replacements.

Percentage of locations found to have contaminated dispensers:



### THE CONCLUSION

High levels of bacterial contamination were found in 25% of the bulk fill liquid soap dispensers tested in this study. Since these samples represent a diverse cross section of geographical locales and individual sites, it is concluded that bulk fill liquid soap dispensers commonly found in the USA are routinely contaminated with bacteria. The type and level of bacteria found in these systems have the potential to cause a variety of health issues including respiratory, bloodstream, urinary tract and skin infections thus represent a health risk to users.

Contamination was more likely to have occurred when the soap is open to repeated exposure to bacteria hence the packaging and the dispensing method plays a significant role in product safety.

No bacteria were detected in dispensers that required sealed soap replacements.

#### Source:

Gerba, C.P. et al, Bacterial Contamination of Liquid Hand Soaps. Unpublished Study, 2006, University of Arizona. [http://www.germcentral.com/reports-publications/germ-central-DrGerba\\_0106\\_letter.pdf](http://www.germcentral.com/reports-publications/germ-central-DrGerba_0106_letter.pdf)

Kimberly-Clark Professional 52 Alfred Street, Milsons Point, NSW, 2061, Australia. Level 1, 86 Plunkett Avenue, Manukau, Auckland, New Zealand.  
ACN 000 032 333 ABN 65 000 032 333 © 2009 KCVWV. All rights reserved.

Customer Care Australia 1800 647 994 New Zealand 0800 447 814 [www.kcprofessional.com](http://www.kcprofessional.com)