

Scientific Interpretive Summary

Scientific evidence to support the recommendation for “20 +20” handwashing

Hand hygiene is considered to be a key component of infectious disease control from both food and clinical safety perspectives. The New Zealand Food Safety Authority and the Ministry of Health both recommend in their risk communication messages that handwashing is carried out according to the ‘20+20 rule’. This involves washing of hands for 20 seconds with soap and hot water and drying for 20 seconds with a clean, dry towel or paper towel.

To assess the evidence base for these risk management measures NZFSA commissioned a literature review from ESR. The following has been concluded:

- With respect to removal of transient microorganisms, there is some evidence to suggest that handwashing times in excess of 60 seconds provide little or no extra benefit. In some cases evidence suggests no additional benefit in handwashing durations greater than 10-15 seconds
- For a range of organisms artificially applied to hands, handwashing for a duration of 30 seconds has been shown to result in a decrease in microbial counts of the order of two log units. However, there is little evidence to suggest an optimum duration of handwashing in the range 10-60 seconds

There is little quantitative evidence on which to base guidelines for the duration of hand drying. While some studies suggest superior microbial removal with one method or other, in general no significant differences have been observed. Achieving fully dry hands appears to be important and studies suggest that this will be achieved in a shorter time frame by the use of towels (paper or cloth) than hot air dryers.

Updated 28 April 2009