

# Soap's clean sweep

By JOHN von RADOWITZ

FOR ridding hands of viruses, nothing beats old-fashioned soap and water, scientists have discovered.

The biggest study yet comparing hand-washing products found modern disinfectant cleansers were not good at tackling resistant viruses.

Soap and water worked better because the infectious agents were simply removed from the skin and flushed down the drain.

Among the viruses susceptible to soap were those which caused the common cold, hepatitis A, acute gastroenteritis and polio.

The researchers, from the

## Viruses 'washed away'

University of North Carolina at Chapel Hill, in the US recommended ordinary soap should be used in hospitals as well as waterless hand rubs and wipes.

They wrote in the *American Journal of Infection Control*: "Although viruses are a less common cause of health care associated infections than are bacteria, in situations in which infection with viruses is likely... the use of soap and water washes should be considered."

Anti-microbial agents were most efficient for reducing bacteria on the hands. But alcohol-based products —

widely used in hospitals because of their convenience — performed relatively poorly.

Alcohol rubs became significantly less effective after hands were contaminated and washed a number of times over. Waterless wipes only removed half the bacteria from the hands.

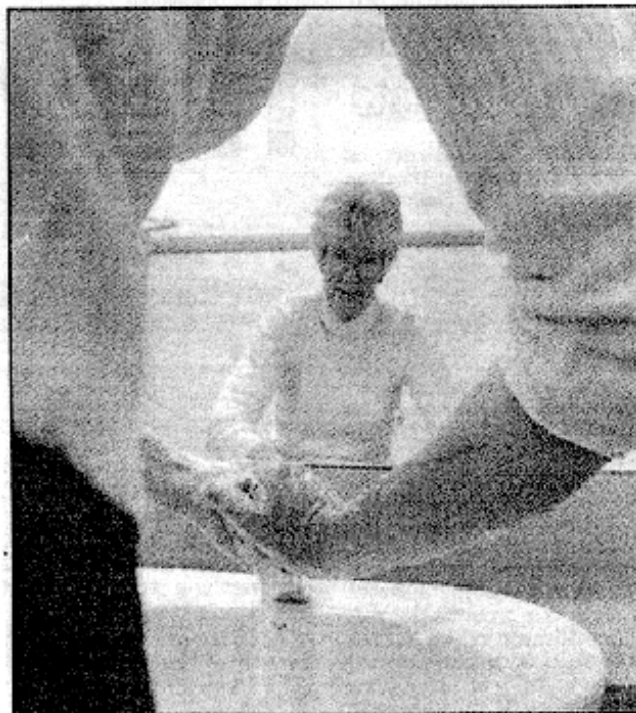
The study was the first to test the ability of 14 different hand hygiene agents to tackle both bacteria and viruses.

It was also the first to investigate the effect of cleaning hands for just 10 seconds — the average time spent by doctors, nurses and other

health-care workers. "Previous studies have had people clean their hands for 30 seconds or so, but that's not what health-care workers usually do in practice, and we wanted to test the products under realistic conditions," said Dr Emily Sickbert-Bennet, who co-led the research.

A total of 62 adults took part in the study. Volunteers first cleaned their hands and were then contaminated with the harmless bacterium *Serratia marcescens* and the virus MS2 bacteriophage.

International research suggests that improved hand hygiene could reduce hospital infection rates by between 10 and 50 per cent.



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— Advice from University of North Carolina