

## **Barrier protection with examination gloves: double versus single**

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In a series of experiments, the barrier integrity of single and double vinyl and latex examination gloves were tested for dye and water leaks after being placed under stress.

A total of 886 examination gloves (385 vinyl: single, 199; double, 186; and 501 latex: single, 290; double, 211) were tested with a standardized clinical protocol designed to mimic patient care activities.

Leakage rates for single or double gloving were significantly higher for vinyl than for latex gloves. Single vinyl gloves were significantly more likely to leak than were double vinyl gloves (51.3% and 19.7%,  $p < 0.0001$ ).

However, there were essentially no differences in leakage rates for single or double latex gloves (4.1% and 3.8%,  $p = 1$ ). Significantly higher rates of leakage were identified with the water leak test than with the dye test for vinyl ( $p < 0.001$ ) but not for latex ( $p = 0.22$ ) gloves.

For vinyl but not latex gloves, there were significant differences in leakage rates by brand. We conclude that double gloving offers little advantage during routine procedures associated with minimal stress to the gloves or when latex gloves are worn.

*SOURCE:* US National Library of Medicine (NLM) and PubMed