

## **Health Care Workers: Risk Factors for Nonlatex and Latex Gloves During Surgery**

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This study examined glove failure and related factors in both nonlatex and latex surgical gloves after routine use. A federally funded research study was conducted to collect surgical gloves from those directly involved in surgical procedures. All gloves were examined in the laboratory for both visual defects and barrier integrity. A total of 11,118 usable surgical gloves were examined. The overall defect rate was 7.8%; nonlatex gloves were significantly more likely to fail (8.4%) than latex gloves (6.9%). The majority of defects in the latex gloves (90%) and nonlatex gloves (70%) were not detected by visual examination. Separate logistics regression models examined predictors of defects for the gloves. The only factor that increased the odds of a defect in nonlatex gloves included gloves worn by a scrub person and gloves used in certain surgical services. Scrub persons had a higher defect rate despite wearing their gloves for a significantly shorter time than other health care workers. Latex and nonlatex gloves fail under different conditions. Latex gloves fail primarily due to length of use, whereas nonlatex gloves are more sensitive to conditions of use (e.g., type of health care worker and type of surgery). Providers can help guard against glove defects by double gloving and by changing gloves often, especially when using nonlatex gloves in higher-risk surgeries.

*SOURCE: AIHA Journal*