

## SUMMARY OF:

### ALLERGIC CONTACT DERMATITIS TO SYNTHETIC RUBBER GLOVES

### CHANGING TRENDS IN PATCH TEST REACTIONS TO ACCELERATORS

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## BACKGROUND

One of the largest causes of contact dermatitis has been linked to rubber gloves. This is especially most prevalent in health care workers.

## OVERVIEW

It is investigated in this study that allergic contact dermatitis (ACD) can be caused not only by rubber gloves, but occur with non-latex products as well. Most of the contact allergies have been linked to the accelerators used in rubber to speed up the vulcanization process.

## RESULTS

626 patients were tested between 5/1/07 and 5/31/09. Out of 626 patients 23 patients tested positive to dermatitis due to 1 or more chemicals found in rubber gloves. Many different accelerator chemicals found in gloves could be a contributor to a patient's ACD. Since the mid-1990's the largest chemical contributor to sensitization, Thiurams, has appeared to be on a decline, whereas a carba-mix, ZDEC, ZBDC, and DPG appear to have increased. As manufacturers have looked for alternative ways to lower or eliminate certain accelerator chemicals others have been introduced.

## CONCLUSION

The only way to cure diagnosed chemical-induced ACD due to glove use, is to use gloves that are allergen free from what the patient was tested to be positive to, and/or to stop wearing gloves. Patch testing appears to be the best way in which to uncover all chemicals that a patient might be exposed and reacting to. The changes from ACD and sensitization to rubber glove accelerators from thiurams to a carba-mix are happening most frequently in the healthcare setting.

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**References** 1. Cao et al., Allergic Contact Dermatitis to Synthetic Rubber Gloves: Changing Trends in Patch Test Reactions to Accelerators. [www.archdermatol.com](http://www.archdermatol.com). ARCH DERMATOL/VOL 146 (NO. 9), SEP 2010. 1001-1007.

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