Rubber Science, **25**(2): 139-155, 2012 *REVIEW ARTICLE*

ASSESSMENT OF THE RISK OF TYPE I LATEX ALLERGY SENSITIZATION OR REACTION DURING USE OF PRODUCTS MADE FROM LATEX DERIVED FROM GUAYULE AND OTHER ALTERNATE RUBBER PRODUCING SPECIES

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Medical gloves provide an effective barrier to the transmission of human pathogens and help protect both healthcare professionals and patients against contracting infectious diseases. Medical gloves, historically, have been manufactured from natural rubber latex (NRL) tapped from the Brazilian rubber tree (*Hevea brasiliensis*???????????•??•???¡??????•???????????????•?????? ????j?????????? •????? •????•???r sSR?????••??????? protein in the glove matrix and huge numbers of people were exposed. *Hevea* latex proteins in natural rubber elicit anti-*Hevea*???•?¡????•????• j???? ??? •???•????•??•?•???? • ???• ?????????? ???? ?????????•?£?•????? ? individuals who are sensitized to NRL proteins will subsequently experience life-threatening allergic symptoms following a subsequent airborne or contact exposure to latex allergen.

The public health risk of Type I latex allergy has led to gloves being made from alternative materials and receiving FDA 510(k) clearance. However, they are not preferred by healthcare providers due to their physical limitations.

Natural rubber latex can be produced from many plant species and guayule (*Parthenium argentatum*) has been commercialized on the basis of its very low protein content, and non-crossreactive latex.

This report summarizes and explains the information currently available on the safety of guayule latex and comments on other alternate latex contenders.

Keywords: Dandelion, Guayule, Latex allergy, Natural rubber latex

INTRODUCTION

Natural rubber latex remains the best and most suitable protective material for high performance medical gloves during surgery. However, the U.S. Food and Drug Administration (FDA) cleared synthetic ???•?????????•??¡?? ???•?????•?????????????•?? to address the public need for medical gloves by those sensitized or allergic to latex.

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