

INSTRUCTIONS FOR COMPLETING HOME STUDY COURSE

You may complete this course at your own pace, however, we request that you submit your test answers no later than six (6) months after the course is issued to you.

When you have finished the study course, please send your completed answer sheet to NADA, P.O. Box 215, Merrifield, VA 22116.

You will be notified in writing of your test results within thirty days after receipt of your test answers. You must have a minimum of fifteen (15) correct answers to pass the test and receive continuing education credits.

If you do not pass the test, you may retake it at a cost of \$5 fee to retake.

LATEX ALLERGY IN THE DENTAL ENVIRONMENT

This continuing education activity is presented through the National Association of Dental Assistants as a registered provider.

The home study course is available for purchase at a special price for members who have completed their answer sheet.

A CONCERN OF STAFF AND PATIENTS

We hope you enjoy this course and we commend you on your desire to further your education. If you have any questions or comments, please direct them to NADA.

The National Association of Dental Assistants offers additional home study programs. For an up-to-date listing and pricing, please call 1-800-368-1166 or write to NADA at the address listed in this book.



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Introduction

HOW SERIOUS IS LATEX HYPERSENSITIVITY?

Frequent users of latex materials may develop allergies to latex proteins, with allergic reactions varying from mild to life-threatening. According to the National Institute for Occupational Safety and Health (NIOSH), recent studies indicate that from about 1% to 6% of the general population and about 8% to 12% of regularly exposed health care workers are sensitized to latex. As exposure continues, sensitivity heightens and symptoms can become severe.¹

Federal agencies such as NIOSH, the Occupational Safety and Health Administration (OSHA), the Food and Drug Administration (FDA), and independent researchers continue to study the effects of latex and publish guidelines for the protection of health care workers and the management of medical facilities where latex-containing products are found in abundance.

The FDA published regulations September 1997 regarding the labeling of latex-containing products. These regulations are to be in effect by September 1998.

Dental facilities must adopt clear-cut guidelines to implement precautions for the protection of staff and patients. These include educating staff about latex allergy, identifying staff and patients who are "at risk," referral to a knowledgeable physician for testing, evaluating latex-containing products, and establishing a protocol to achieve a latex-minimal environment.

WHAT IS LATEX?

Natural rubber latex (NRL) comes predominantly from the milky fluid sap of the rubber tree and is used in thousands of everyday products. Its strength, flexibility, tear resistance and elasticity make it superior to other materials for many tasks. Because latex is an effective barrier against bacteria and viruses, health care workers rely on latex gloves to prevent the transmission of human immunodeficiency virus (HIV), hepatitis B virus, and other infectious agents.

WHAT HAPPENS DURING AN ALLERGIC REACTION?

The immune system of people with allergies reacts abnormally to ordinarily harmless substances, **allergens**, that cause no symptoms in the majority of people. About 12 % of the general populace has one or more allergies. People with this condition are called **atopic**. **Atopy** can be inherited, so allergies are often seen to run in families.

The immune system of atopic individuals reacts to allergens as though they were **antigens**, or foreign bodies, and forms **antibodies** to fight them. The immune system also sensitizes the white blood cells to interact with the antigens to destroy them.

The antibodies, called **immunoglobulin E (IgE)**, coat mast cells in the airways, skin, and stomach. Once activated these cells release histamine and prostaglandins. These substances increase vascular permeability and vasodilation, cause contraction of bronchial smooth muscle, and increase secretion of mucus. Symptoms may be asthma, hay fever, hives, or the most severe **anaphylactic shock**, which causes swelling inside air passages. Suffocation can result, so immediate first aid is vital.