

Safetygram

NCI Frederick

ISM190

General Safety

December 2011

Latex Exposures

Latex gloves have long been used by research and support personnel at the NCI Frederick as primary barrier protection from biological agents and radioisotopes. However, repeated exposure to proteins in natural rubber via skin contact or inhalation can cause latex allergies in some individuals. There are three potential dermal illnesses associated with chronic use of latex gloves:

- Urticaria (immediate type hypersensitivity)
- Allergic contact dermatitis (delayed type hypersensitivity)
- Irritant contact dermatitis (non allergic inflammation attributed to a primary irritant)

In addition to symptoms of skin rash and inflammation, exposure to latex can cause respiratory irritation, asthma and, in rare cases, anaphylactic shock. To reduce the risk of health effects from exposure to latex, EHS advises that you follow these guidelines:

- **Latex Exposure Elimination:** Use non latex gloves such as nitrile, neoprene, and vinyl. Thin matrix nitrile gloves provide protection against a broad range of chemicals and nominal loss of dexterity. Contact EHS for information on the suitability of special gloves.
- **Latex Exposure Reduction:** Powder free latex gloves may reduce but not eliminate latex exposures. Their use minimizes the inhalation of latex proteins absorbed onto the powder, which can become airborne when the glove is removed. The NCI Frederick Warehouse includes various sizes of these gloves as stock items. Some persons may experience effects solely from exposure to the glove powder and not latex. Using powder free gloves would preclude this exposure.
- **Wash hands.** Use soap and water after removing latex gloves.
- **Avoid using lotions or barrier creams beneath your gloves.** Ingredients in lotions, both petroleum based and water based, can compromise the integrity of the gloves. In some cases, these materials have amplified systemic absorption of chemicals that penetrate glove material.

Employees suspecting symptoms of latex allergy should immediately contact OHS for evaluation and treatment (x1096).