## Are You Keeping Your Hands Healthy? John A. Molinari, Ph.D.

#### Q: What is the most common cause of dermatitis?

A: The most influential factor relates to dental professionals not caring for their hands properly. After repeated exposure to soaps and chemicals, clinicians often don't follow the steps needed to protect their hands. For example, when soap is not rinsed off the hands and then the gloves go on, the hands perspire, reactivating the soap left on the hands, causing irritation. A reddened area can develop with itching. This irritation eventually breaks epithelium, thereby initiating dermatitis. This is a nonspecific dermatitis caused by contact with substances that physically or chemically break down or damage the skin. This non-immunological adverse reaction is the most common form of observed hand dermatitis.

#### Q: What are the symptoms of nonspecific dermatitis?

A: The hands become reddened, dried, cracked, and they may even bleed in severe incidences. After washing hands 25 to 30 times a day, they can become dry. This occurs when moisture is not replaced with a water-based type of emollient, when the hands are not dried properly, and/or when soap residue is left. When the hand wash agent is not properly rinsed from an existing site of irritation, the wounded area holds the soap more tenaciously. Thus, an important component of hand washing requires that any area of dermatitis be rinsed even better than the rest of the hand.

# Q: What are the most common irritants that cause contact dermatitis?

**A:** Metal and jewelry are common irritants, like nickel. Many people become allergic to their watches as the metal bands often contain nickel. With regard to contact dermatitis reactions from latex gloves, there are certain chemicals used in their manufacturing than can stimulate these allergic reactions.

Among the more allergenic components are thiurams, antioxidants, and vulcanization accelerators. Remember, in the Type I latex sensitivity, a few of the natural rubber proteins cause allergic reaction, while Type IV, the offending agents are chemicals added to the latex in manufacturing.



#### Q: Are the waterless disinfecting soaps effective?

A: They work if the hands are not dirty, that is contaminated with body fluids such as saliva, blood, or exudate. The 2003 Centers for Disease Control and Prevention Guidelines for infection control in dentistry note that when hands are not visibly soiled, the waterless hand hygiene agents are useful and effective as alternatives to traditional hand washing with liquid soaps or antiseptics. If hands are visibly soiled, then only soap and water or antiseptic hand washes with soap and water should be used. The use of waterless hand hygiene agents has been shown to be effective in a number of health professional settings in part because they have fostered better an increase in hand washing compliance. Accumulated data have shown that increased compliance is translated to lower hospital-acquired infection rates. However, there is a note of caution that also must be included. If a person has dry skin, these agents may further the problem. Many of the newer products contain emollients like glycerin and aloe vera, which help moisturize the epithelium and reduce dryness and cracking.

#### Q: Are there any preventive therapies on the horizon?

A: Allergy shots are not given for latex sensitivity or contact dermatitis so basically creating new products and, in the case of latex, more non-latex products as a substitute are the current options.



#### Cutting Through The Red Tape: Infection Control & OSHA Update presented by

Dr. John Molinari, Director of Infection Control

### Wednesday, 9th Dec 2009

Time: 9am-noon Credit Hours: 3

#### This course includes:

- Infection control recommendations vs. OSHA regulations
- OSHA bloodborne pathogens standard
- Components of standard
- Bloodborne pathogens update
- Post-exposure management protocols
- Hand hygiene
- Handwashing & alcohol-based hand sanitizers
- Infection control techniques
- Personal protective equipment
- Instrument sterilization & reprocessingEnvironment surface asepsis
- Disposable covers
- Surface disinfectants sprays vs. wipes
- Dental waterline asepsis
- Academy of General Dentistry

**Venue:** The Education Center, The Dental Advisor, Ann Arbor, Michigan **3 Credit Hours • \$125.00 •** Early Registration Special **\$99.00** by 1<sup>st</sup> Sept 2009 For registration information visit **www.dentaladvisor.com** or contact: **Jackie Lane** 734.665.2020 ext.105 or jackie@dentaladvisor.com