

Artificial Nails: A Fact Sheet for Employees

Policy: Effective December 31, 2003, any individual who has direct, hands-on contact with patients' skin may only have natural fingernails. No artificial fingernails or nail enhancements including (but not limited to) overlays, wraps, tips or attached decorations are permitted because of documented outbreaks of infection. Bacteria are known to stick to artificial nails and are known to persist even after appropriate hand hygiene (hand washing).

Here are some commonly asked questions:

Q: *Why are nail enhancements such as artificial nails, nail wraps, nail tips, acrylic lengtheners, appliquéés, etc., no longer permitted for staff with patient contact?*

A: Several scientific studies have shown that artificial nails and appliquéés have been contaminated with germs (both bacteria and fungi) that have been passed to patients and caused serious infections. When artificial nails are contaminated ("colonized"), there is usually no change in the nails that you can see.

Q: *Why doesn't hand washing prevent this contamination?*

A: Although hand washing is ordinarily effective, the wearing of nail enhancements could hinder its effectiveness. Studies have shown that hospital personnel with nail enhancements had more bacteria both before and after hand washing than did personnel with natural nails.

Q: *Can nail enhancements harm the person that is wearing them?*

A: Yes, nail enhancements sometimes cause infections of the nail bed that are difficult to treat. Also, long-term artificial nail use causes natural nails to become thin, brittle or damaged. If you are concerned about the state of your natural nails, please contact Occupational Health Service.

Q: *Won't wearing gloves protect the patient?*

A: No, gloves do not provide complete protection, especially when worn with long nails. Holes can develop and germs could pass between you and the patient.

Q: *Can I wear nail polish?*

A: Manicures and nail polish are permitted. Nail polish that is obviously chipped has a tendency to harbor greater numbers of bacteria. Chipped polish should be removed.

If you have any further questions, please contact your nurse manager. See page two for additional references.

*Adapted from Saiman, L., Lerner, A., Saal, L., Todd, E., Fracaro, M., Schneider, N., Connell, J., Castellanos, A., Scully, B., and Drusin, L. (2002). Banning artificial nails from health care settings. American Journal of Infection Control, June, 2002.

Artificial Nails: A Fact Sheet for Employees (continued)

The following are additional references:

Hedderwick, S., McNeil, S, Lyons, M, Kauffman, C. (2000). Pathogenic organisms associated with artificial fingernails worn by healthcare workers. *Infection Control and Hospital Epidemiology*, 21(8).

- In this article, two separate studies were conducted to determine the differences in the identity and quantity of microbial flora from healthcare workers (HCW) wearing artificial nails compared with control HCWs with natural nails. HCWs with artificial nails were more likely to have a pathogen isolated than controls.

McNeil, S., Foster, C., Hedderwick, S., and Kauffman, C. (2001). Effect of hand cleaning with antimicrobial soap or alcohol-based gel on microbial colonization of artificial fingernails worn by health care workers. *Clinical Infections Disease*, 32:367-72.

- This study assesses the effect of hand hygiene on microflora for HCWs with and without artificial nails. Significantly more HCWs with artificial nails than without had pathogens remaining after hand cleaning with soap or gel.

Moolenaar, R., Crutcher, M., San Joaquin, S, Sewell, L., Hutwagner, L., Carson, L., Robinson, S., Smithee, L., and Jarvis, W. (2000). A prolonged outbreak of pseudomonas aeruginosa in a neonatal intensive care unit: Did staff fingernails play a role in disease transmission?, *Infection Control and Hospital Epidemiology*, 21(2).

- Findings in this study suggest a possible role for long or artificial fingernails in the colonization of HCWs hands with Pseudomonas Aeruginosa . Evidence demonstrated an association between acquiring P. Aeruginosa and exposure to two NICU nurses with long or artificial nails.

Saiman, L, Lerner, A, Saal, L., Todd, E, Fracaro, M., Schneider, N., Connell, J., Castellanos, A., Scully, B., and Drusin, L. (2002). Banning artificial nails from health care settings. *American Journal of Infection Control*, June, 2002.

- Discusses the development and implementation of a hand hygiene guideline eliminating artificial nails based on “category 1A” (strongly supported) evidence.

Toles, A. (2002). Artificial nails: Are they putting patients at risk? A review of the research. *Journal of Pediatric Oncology Nursing*, 19(5).

- Review of data related to bacterial and fungal contamination of artificial nails and their implications to HCWs.