

***In* CONTROL**

The Dental Infection Control Supplement to Dental Items of Significance

NUMBER 16

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DIS is now firmly in place at our new home here at the Naval Training Center, Great Lakes, Illinois. All new personnel arrived by early fall, and we are in full stride entering the new year. For those of us who came from San Antonio, we are in climate shock and still awaiting arrival of our Air Force parkas. We have been told, "they're in the mail." As I stated in the last issue of ***In*CONTROL**, our new address is:

USAF Dental Investigation Service
Detachment 1, USAFSAM
310C B Street, Building 1H
Great Lakes Naval Training Center, IL 60088-5259

Our new phone and fax numbers are:

DSN 792-7676

DSN FAX 792-7667

COMMERCIAL (847) 688-7676

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As always, you can contact me directly at DSN 792-7668 or Commercial at (847) 688-7668 or via e-mail at joseph.bartoloni@ndri.med.navy.mil.

I will continue to keep you updated on the latest issues in infection control and occupational health and safety in dentistry through the publication of ***In*CONTROL**.

DENTAL INFECTION CONTROL AND OCCUPATIONAL HEALTH COURSE

As you are probably aware, the annual USAF Dental Infection Control and Occupational Health Course has been cancelled due to lack of funding. To alleviate this situation, DIS (in conjunction with the Organization for Safety and Asepsis Procedures [OSAP]) is developing a new course in dental infection control and occupational health and safety similar to the USAF course. This course would be open to military personnel as well as to civilians who have an interest in these areas. We are currently in the planning stages. I will be providing more information as it becomes available.

2001 ORGANIZATION FOR SAFETY AND ASEPSIS PROCEDURES ANNUAL SYMPOSIUM

The 2001 Organization for Safety and Asepsis Procedures (OSAP) Annual Symposium will be held from 14 to 17 June in Orlando, FL. The meeting will feature the latest information on dental infection control and office safety issues. It offers a unique opportunity to exchange ideas with top experts in the field of dental infection control and occupational health, and provides a wealth of information on new developments in these fields. Contact OSAP for information on membership and the upcoming symposium.

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OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION POSTER

On 9 August 2000, the Occupational Safety and Health Administration (OSHA) introduced a new workplace poster for informing workers of their right to a safe workplace. The posters are free and may be downloaded from the OSHA website at www.osha.gov/oshpubs/poster.html. The poster is also available by writing to: OSHA Publications Office, Room N3101, 200 Constitution Avenue NW, Washington, D.C., 20210.

Employers are not obliged to replace a poster that is already present, but they are required to post an OSHA notice of employee rights in a prominent location. This new poster explains to employees that they have the right to a safe workplace and describes how they can file a complaint, report an emergency, or seek OSHA advice. Employees are also informed that they have a right to confidentiality.

ERGONOMICS STANDARD

The final version of the Occupational Safety and Health Administration (OSHA) ergonomics regulation cleared the White House Office of Management and Budget. The next step was publication in the *Federal Register*, which should have occurred by the end of 2000. The standard seeks to protect workers from job-related carpal tunnel syndrome and other musculoskeletal disorders (MSDs). MSDs are defined by the regulation as injuries or disorders of the soft tissue and nervous system associated with exposure to repetitive stress, awkward posture, and other occupational risk factors. Injuries occurring outside of work or caused by slips, trips, falls, and vehicular accidents are not covered by the regulation.

The standard, which was issued on 14 November, will affect most of the nation's employers and more than 102 million employees. It takes effect on 16 January 2001, but the employer's first obligation under the standard, **to provide employees with basic information**, does not have to be met until 14 October 2001. Deadlines to comply with other obligations under the standard will be phased in over a four-year period beginning 16 January 2001.

Basic information about the Standard

All covered employers are required to provide employees with the following information:

- (1) Common MSDs and their signs and symptoms**
- (2) The importance of reporting MSDs early and the consequences of failing to do so**
- (3) How to report MSD signs and symptoms in the particular workplace**
- (4) Risk factors, jobs, and work activities associated with MSD hazards**
- (5) A Summary of the ergonomics final standard**

OSHA has developed information sheets that employers can distribute to employees and post in their workplaces to comply with the standard's informational requirements.

The standard will also require employers to develop an ergonomics plan to prevent or minimize MSDs in the workplace. The regulation is two-tiered based on past history of MSDs. Occupations with a record of MSDs must implement a comprehensive ergonomics program. Employers without a history of MSD only have to comply with a minimum of requirements. If an MSD occurs, the employer may attempt to implement a "quick fix" to avoid having to implement a full ergonomics program. If the "quick fix" is unsuccessful, or additional MSDs occur, the employer would be required to implement a comprehensive ergonomics program.

A comprehensive program would include the following: providing employees with ergonomics training, analyzing tasks and jobs for potential ergonomics hazards, adjusting work stations and work flow to control identified hazards, regularly evaluating the office ergonomics program, and providing for medical management of employees with MSDs. Managing employees who have MSDs may include removing them from job duties with pay.

The American Dental Association (ADA), which challenged the necessity for the standard, is reviewing the 600-page final rule and expects to have an analysis available soon. Initial reviews indicate that **the standard would require all affected employers, including dentists, to provide information to employees about risk factors for, and signs and symptoms of, musculoskeletal disorders.** Legal challenges to the ergonomics standard have already been filed and others are expected. Unless halted by a court, the standard will take effect as scheduled while the legal challenges are pending.

SAFER NEEDLE DEVICES

In 1984, the first case of occupationally-transmitted HIV through a needlestick was reported. This brought about a new awareness of the occupational hazards faced on a daily basis by healthcare workers. One of the results of this awareness was the development of safer needle devices. A safer needle device uses engineering controls (i.e., built-in safety features) to prevent or reduce injuries before, during, or after use. These features are now being incorporated into local anesthetic syringes **as well as** IV systems. There are different types of safer needle devices, however the common feature is that they are designed to reduce the risk of needlestick injuries for healthcare workers.

The Food and Drug Administration (FDA) has recommended that safe needle devices incorporate several features in their design. The features should: provide a barrier between the hands and the needle after use; allow or require the worker's hands to remain behind the needle at all times; be an integral part of the device and not an accessory; be in effect before disassembly and remain in effect after disposal to protect downstream workers; be simple and intuitive to operate; and require little or no training to use. One other key element is that the feature not have a negative impact on the delivery of patient care.

Not all needlestick injuries are preventable, however research has shown that most injuries from hollowbore needles (e.g., anesthetic and IV needles) can be prevented. Many of these needlesticks can be prevented by using needles that have a safety feature known as a self-resheathing mechanism where the needle is covered automatically after use. It is important to note that there are no standard criteria for evaluating the safety efficacy of self-resheathing devices. Clinics implementing needlestick prevention programs should evaluate the effectiveness of various devices in their specific clinical settings. Unfortunately, this is not easy to do. DIS believes that most practitioners should (at least initially) rely on evaluations provided by outside organizations before selecting a safety device for hands-on clinical evaluation.

NEEDLE SAFETY

On 6 November 2000, President Clinton signed the Needlestick Safety and Prevention Act. This new federal law, which will take effect sometime during the summer of 2001, will require healthcare employers to implement procedures to prevent accidental needlesticks and other sharps injuries among healthcare workers. The law seeks to do so by amending the OSHA Bloodborne Pathogens Standard (see below*) and requiring healthcare facilities to select safer medical devices such as needless systems and sharps with engineered protection against injury. The new law reinforces the current OSHA compliance directive which instructs employers (dentists) to evaluate and implement appropriate, commercially available, effective medical devices that are designed to eliminate or reduce occupational exposure to bloodborne pathogens.

As with other safety acts passed in recent years, this legislation imposes requirements on employers. Under the new law, healthcare employers must annually review new technologies and devices, such as self-resheathing safety needles, that may reduce employee exposure to bloodborne diseases. Also, employers must involve employees whose jobs put them at risk of exposure to bloodborne diseases in the annual evaluation and selection of safer medical devices. The dental clinic's annual review of these devices must be recorded in the clinic's Exposure Control Plan. Any devices that are found to be "commercially available and effective" must be incorporated into use. The new bill also requires employers with 10 or more employees who are currently required to maintain an OSHA 200 log, to also maintain a sharp's injury log.

It is important to note that stricter requirements may be imposed on a clinic if mandated by the OSHA within a particular state. For example, if Michigan's OSHA requires that employers follow a stricter set of rules than the federal OSHA, employers in that state would have to follow the Michigan OSHA requirements. This is an important concern because there are currently 23 states that have state OSHA programs.

*Amendments to the Bloodborne Pathogens Standard Proposed by the Needlestick Safety and Prevention Act

The Bloodborne Pathogens Standard published at 29 CFR 1910.1030 shall be revised as follows:

- (1) The definition of 'Engineering Controls' (at 29 CFR 1910.1030(b)) shall include as additional examples of controls the following: 'safer medical devices, such as sharps with engineered sharps injury protections and needleless systems.'
- (2) The term 'Sharps with Engineered Sharps Injury Protections' shall be added to the definitions (at 29 CFR 1910.1030(b)) and defined as 'a nonneedle sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.'
- (3) The term 'Needleless Systems' shall be added to the definitions (at 29 CFR 1910.1030(b)) and defined as 'a device that does not use needles for: (A) the collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established; (B) the administration of medications or fluids; or (C) any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.'
- (4) In addition to the existing requirements concerning exposure control plans (at 29 CFR 1910.1030(c)(1)(iv)), the review and update of such plans shall be required to also—
 - (A) 'reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens'; and
 - (B) 'document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.'
- (5) The following additional recordkeeping requirement shall be added to the bloodborne pathogens standard (at 29 CFR 1910.1030(h)): 'The employer shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum—
 - (A) the type and brand of device involved in the accident
 - (B) the department or work area where the exposure incident occurred
 - (C) an explanation of how the incident occurred.'
- (6) The following new section shall be added to the Bloodborne Pathogens Standard: 'An employer, who is required to establish an Exposure Control Plan shall solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.'

Bottomline Dental Implications!!

Needless to say, this is a lot of legalese for most of us. What, after all, does it mean? Based on the American Dental Association's analysis of the Needlestick Safety and Prevention Act, the act will not mandate that dentists adopt a new injection device until the dentists decide, based on their professional

judgement, that the device is safe, effective, and appropriate. In light of this, DIS recommends the following steps that clinics should take:

- (1) Develop a sharps injury log.
- (2) Begin using IV safety catheters that have a history of efficacy (base decision on outside evaluations and opinions from local hospital staff).
- (3) Begin using new safety needles and/or safety syringes that you believe, based on your professional judgement, are effective and appropriate for your practice. Please note that DIS has evaluated three such products and found them less than ideal for routine dental practice. A recently published article found that evaluators of dental safety needles expressed concerns about being able to use them effectively. The article also reported them to be no safer than traditional anesthetic needles (Cuny et al. J Am Dent Assoc 2000;131:1443-1448).
- (4) Revise your Exposure Control Plan to reflect that you are actively reviewing the new safety devices.

EVALUATING AND SELECTING SAFER NEEDLE DEVICES

Manufacturers have responded to the need for safer devices, and as a result, a variety of safer needle devices have become available. This is not surprising given that 1,000 U.S. patents have been issued since 1984 for safer medical devices. Clinics are faced with the tremendous task of selecting and evaluating products from the vast array of devices available.

Although OSHA does not require employers to institute the most sophisticated types of engineering controls, it does require the employer to evaluate the effectiveness of existing controls and to review the feasibility of instituting more advanced engineering controls. Research to date has shown that **no single safer needle device (i.e., IV safety catheter or safety needle/syringe) works equally well in every facility**, so employers must develop their own programs to select the most appropriate devices. The goal is to choose devices that are clinically effective, acceptable to users, and effective in reducing needlestick injuries in that particular setting.

Establishing a program to select and evaluate safer medical devices should be done in a systematic manner. One good way to start is by reviewing available needlestick injury data for your facility. The data should include the personnel involved, the devices currently used, and the circumstances and frequency of needlestick events. These data can assist the employer in determining how employees can maximally benefit from changing to a safer needle device.

When deciding on a specific safer needle device, several aspects should be taken into account. Ideally, product choice should be based on the needs of the primary users and on the needs of the patients who must continue to receive safe, efficient, and comfortable care. Past history indicates that healthcare providers tend to reject products that they think will interfere with patient care.

BIOLOGIC MONITORING

Biologic monitors, also called biologic indicators (BIs) or spore tests, contain highly resistant bacterial spores. *Bacillus stearothermophilus* is used for testing steam autoclaves and chemical vapor sterilizers, and *Bacillus subtilis* is used for testing dry heat and ethylene oxide sterilizers. The spores are processed through a sterilization cycle, then cultured to determine if they have been destroyed. Spore survival (a positive culture) indicates a sterilization failure, while complete spore kill (a negative result) is considered verification of successful sterilization.

There are several biologic monitoring products and services available. Biologic monitors are available on spore-impregnated strips or in self-contained vials, and can be prepared as single or dual species indicators. BIs can be monitored in-office or can be sent to a military medical lab or a commercial monitoring service.

Most military dental clinics use in-office monitoring. Sterilizers that run several types of cycles (fluids, flash, unwrapped, etc.) should be monitored with a separate BI for each mode, because the sterilization parameters for each cycle are different.

To verify the pre-sterilization viability of the spores, a control spore should be incubated with every test spore. The control spore should be handled exactly like the test spore except that it is not subjected to sterilization. It should have the same lot number and come from the same box as the test spore. If the control fails to grow on incubation, it can be assumed that either the spores were not viable or the incubation procedure was compromised. As you can see, ensuring that the incubator works properly is not a trivial concern. Most incubators have a thermometer, and it is recommended that the incubator temperature be verified regularly. If the incubator is not maintaining its predetermined temperature, false results could occur. Consider documenting incubation temperature along with the results of daily checks for growth at 24 and 48 hours.

Document the results of all biologic monitoring. Records should include:

- the sterilizer identification number
- date
- duration and temperature of the sterilization cycle
- a description of the general contents of the load
- operator's name
- results of biologic monitoring
- repair and preventive maintenance measures

Many clinics combine their biologic monitoring log with their sterilizer log. Maintaining a biologic monitoring log serves three purposes. First, the log documents that the sterilizer has achieved sterilization parameters. Second, it provides a record of performance and results of biologic monitoring. Finally, it enables easier recall of processed instruments, if necessary.

Undetected sterilization failures place patients and dental staff at risk for disease transmission. Biologic monitors are designed to show that sterilization parameters for a given cycle were met. Although a negative spore test does not prove that all items in the load are sterile, biologic monitors are a major predictor of sterility assurance. The Centers for Disease Control and Prevention, the American Dental Association and the Organization for Safety and Asepsis Procedures recommend at least weekly spore testing of the sterilizer and mode of sterilization. It is important to emphasize to all staff members that biologic monitoring is the most essential component of a dental clinic's sterility assurance program and should never be undervalued.

DIAGNOSING LATEX ALLERGY

Many times, the diagnosis of a latex allergy is not made, or results are questionable due to inaccurate diagnostic tests. The difficulty in diagnosing latex allergy has become an important practical concern because of the dramatic increase in latex allergies among healthcare workers and patients. The problem first surfaced in 1990, when 16 patients died after being exposed to latex barium enema tips. Since then, it has been determined that from 8% to 17% of US healthcare workers and approximately 6% of the general population have symptoms of latex allergy. The FDA has received about 1,000 reports of serious allergic reactions to latex, and there have been about 800 product-liability lawsuits involving latex allergy. Among healthcare workers, employees in dental practices, operating rooms, and intensive care units have the highest incidence rates of latex allergy.

Fortunately, making a diagnosis of latex allergy is becoming easier because a latex extract for skin testing is being used successfully in Europe, and a similar extract has shown promise in US trials as a safe, reliable, and easy-to-use diagnostic tool. To date, however, the Food and Drug Administration (FDA) has not approved the extract for skin testing.

In the absence of an FDA-licensed skin testing extract, allergists must rely on results either from skin tests involving home-brewed extracts or from *in vitro* serologic assays that detect latex-specific IgE

antibodies. The problem is that widely-used and FDA-cleared diagnostic assays for latex-specific IgE in serum have about 25% false-positive rates according to recent research.

The benefits of a safe and reliable FDA-cleared skin test would include uniformity and confidence in diagnosing latex allergy, which would affect workers' compensation and product-liability cases. An approved test would also improve patients' ability to plan their lives and careers around the allergy.

Recommended Precautions in Dealing with Latex Allergy

1. Choose appropriate gloves. **The most important latex-reduction method is converting to nonlatex gloves or powder-free gloves (powder-free to eliminate latex aerosolization from the allergenic proteins that attach to the powder).**
2. Reduce the use of gloves in the general population.
3. Urge manufacturers to wash allergens out of latex gloves.
4. Suggest to healthcare providers that they schedule latex-sensitive patients as the first case of the day because latex is an aeroallergen and stays in the air for at least an hour after latex gloves are used.
5. Emphasize to patients that they need to tell physicians, dentists, employers, school officials, etc., about their latex allergy. Patients with latex allergy should be advised to wear a medical alert bracelet.
6. Emphasize to hospitals and clinics that questions about latex sensitivity should be included in all patient histories and that clear, visible signs be placed on doors to patient and procedure rooms when there is a latex-sensitive patient present.
7. Due to the risk of anaphylaxis, emphasize the need for latex-safe resuscitation equipment.
8. Advise patients to carry auto-injectable epinephrine and to avoid foods that cross-react with latex, such as bananas, kiwis, and avocados.
9. Distribute information about latex allergy to all healthcare employees, students, ancillary personnel, and patients, and encourage them to read labels to identify latex-containing items.

INFECTION CONTROL Q & A

Question: What is the correct procedure to follow when a patient indicates a positive tuberculin purified protein derivative (+PPD) test on the medical history form?

Answer: A +PPD indicates past infection with *Mycobacterium tuberculosis*. It may, but does not necessarily, indicate active tuberculosis (TB). If the patient reports having received appropriate treatment for the condition, the medical record should be reviewed to confirm this. The patient may then be treated by the dental team. If no history of therapy is reported by the patient, he/she should be referred for medical evaluation. The medical evaluation should consist of questions about exposure to TB, a review of symptoms, a lung exam, and a chest radiograph. If no positive indication of active disease is found, the patient may be prescribed medication after an evaluation based on age and risk factors. A patient with a positive chest X-ray (indicating infiltrate) or suggestive symptoms (e.g., a persistent cough for at least 3 weeks, bloody sputum, night sweats, weight loss, anorexia, fever) should have sputum specimens taken. If the specimens indicate an active infection, the patient would then be prescribed appropriate medication.

Patients with a medical history or symptoms suggestive of undiagnosed active TB should always be referred promptly for medical evaluation of possible infectiousness.

Question: How should a latex-allergic patient be treated when endodontic therapy is indicated?

Answer: In patients with a true immediate hypersensitivity to natural rubber latex, the dentist should consult with the patient's allergist prior to treatment. The physician, patient, and dentist should all be involved in any decisions made concerning the dental materials and techniques used in performing the endodontic treatment. With proper precautions, a patient with a history of latex allergy can safely receive endodontic treatment to save a tooth which might otherwise be lost.

The following guidelines should be followed when providing endodontic treatment to a latex-allergic patient. First, schedule the treatment for the first appointment of the day so that the room is as free as possible from airborne allergens. Naturally, the treatment room should be set-up properly with latex-free equipment and materials (e.g., non-latex gloves and rubber dam must be used).

As a result of the chemical similarity between natural rubber and gutta-percha, questions have arisen concerning its use in obturating root canals in patients with a history of allergy to natural rubber latex. To date, there has been only one report of a supposed allergic reaction to gutta-percha. There is, however, no definitive proof that the patient had a true allergic reaction to the gutta-percha.

Kleier and Shibilski (J Endod 1999;25:825-828) note that there is no automatic cross-reactivity with gutta-percha in patients allergic to latex. Gutta-percha and the natural rubber latex found in gloves and rubber dams are significantly different. Gutta-percha is derived from a different tree than natural rubber latex, but is a member of the same botanical family. Gutta-percha occurs naturally as 1,4-polyisoprene and is harder, more brittle, and less elastic than natural rubber. Modern gutta-percha contains only about 20% of the natural product. This difference in chemical make-up and manufacturing between natural rubber latex and gutta-percha results in minimal cross-reactivity.

If a patient were allergic to gutta-percha, what obturation material should be used? Theoretically, if gutta-percha could be completely confined within the root canal space and encased in sealer, no antigen would be present to react with the body's immune system. However, practical considerations have to take precedence over theoretical concerns when patient safety is involved. Other obturation materials, such as silver points and pastes can be used, however clinicians should discuss their disadvantages (compared to gutta-percha) with patients prior to treatment.

Question: Our clinic uses A-dec dental units. Is it necessary to periodically check them for anti-retraction?

Answer: All A-dec units manufactured after February 1986 are designed to be passively non-retracting and do not have an anti-retraction device that needs to be inspected. Being non-retracting means these units do not retract potentially contaminated fluids back into handpieces, three-way syringes, or waterline tubing. A-dec units manufactured before February 1986 may have anti-retraction valves installed in them that can fail over time and result in retraction of oral fluids. (This may also be true for units from other manufacturers.) A-dec will send you (free of charge) a kit to test for nonretraction for units manufactured before February 1986. If you need additional information or wish to request a test kit, contact A-dec at (800) 547-1883.

Question: What are the main components of a dental clinic's sterilization quality assurance program?

Answer: All clinics should use a system with three types of monitoring: physical (recording devices), chemical (heat-sensitive strips to determine that instruments have been exposed to the sterilization agent), and biological (spore testing). By using the three types of monitoring, you establish a pattern of performance by your sterilization equipment. Continued successful performance data provide evidence that sterility is occurring on a consistent basis. All three processes are unique, have different functions, and must be used consistently with proper instrument cleaning, packaging, sterilization, storage, and distribution techniques to ensure sterility.

Question: Our clinic is considering purchasing a new surface disinfectant for our dental treatment rooms. What criteria should we use for selection?

Answer: For dental infection control purposes, a surface disinfectant should be:

- (1) registered with the Environmental Protection Agency (EPA)

- (2) hospital-grade (i.e., it kills three specific organisms: *Staphylococcus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*)
- (3) provide intermediate-level disinfection (i.e., have tuberculocidal activity).

Many times there is confusion regarding the claim for tuberculocidal activity. Many people wonder why is it important for a disinfectant to be tuberculocidal. The reason is that *M. tuberculosis* is the most difficult microorganism to destroy (next to spore-producing microbes) because of its waxy outer cell wall. If you can kill *M. tuberculosis* in a certain amount of time, you have also destroyed HIV, HepB/C and all other microorganisms, except spore-producers. Users should be aware that some products with high alcohol content may be highly effective in inactivating *M. tuberculosis* and not necessarily have superior efficacy against other microorganisms.

Disposal issues should also be considered. In some locations, there may be restrictions on the use of phenolic or chlorine-based disinfectants. It is also important to consider shelf life (i.e., how long the disinfectant is effective in the unopened container) and use-life (i.e., how long it is effective after opening or mixing) in evaluating the cost-effectiveness of the disinfectant. Issues regarding disposal are more likely to be a problem if significant quantities of the solution must be routinely disposed of due to expiration dating.

Question: What are the recommendations for disinfecting dental chairs?

Answer: My first choice would be to barrier protect the chair. If that is not possible, I would follow the chair manufacturer's recommendations for disinfection. After the proper contact time with the disinfectant, I would recommend rinsing and drying the chair. This should help reduce staining and cracking of the upholstery. The chair (except perhaps for control buttons and the headrest) is not considered a high risk for cross contamination and does not require disinfection between patients unless visibly soiled.

Question: Our dental laboratory is considered a "clean" lab. Is it appropriate to eat and drink in the lab?

Answer: Our USAF Dental Laboratory Consultant, Col Douglas Evans, briefly discussed this in an Area Dental Laboratory newsletter. He wrote that all clinics should "establish a designated lunch/break area: technicians should not eat, drink or use consumable products in risk areas." The issue is not so much an infection control concern as a safety issue. The laboratory environment may contain airborne particles (e.g., acrylic resins, dental stone, beryllium, and other metals) that could end up in the food chain.