Infection Control
Dentistry’s Newsletter for Infection Control and Safety

SPECIAL SERIES
This is the second part in our series to help you with infection control by compartmentalizing the issues and procedures. We began with “Before You Walk in the Door”, and we'll follow the current issue with “The Operatory”, “The Instrument Room”, “Support Equipment”, and “Ending the Day”.

The Reception Room
First impressions Although making polyvinyl and alginate impressions is an important part of dental care, making a good impression on a patient in the reception room is important as well. One of the best ways to market the practice is to make a good first impression, and this involves the cleanliness of the reception area.

General cleanliness
The phrase of the day is - Keep It Clean. Most people like to see cleanliness in healthcare facilities, for cleanliness can impart visions of safer surroundings and disease prevention. The public is hearing more and more about “hospital infections” (healthcare-associated infections or hospital-acquired infections - HA infections) where patients acquire an infectious disease after they enter the hospital. Some carry this concern to their presence in other facilities including dental offices.

As Joseph Lister, known as the “father of antisepsis” said well over 100 years ago, “we must see microorganisms with our mind’s eye” since we can’t see them with our naked eyes. But what patients can easily see without assistance are dust, fingerprints, smudges, cobwebs, and dirt on the floors and in corners. Remember, shiny surfaces imply cleanliness, but they also show uncleanliness if not kept up. Regular attention needs to be paid to every surface in the reception room. Imagine the impression it makes when a patient feels a sticky chair arm and sees dirty or ripped upholstery.

The magazines need to be checked periodically for torn covers and smudges. The countertop at the reception window needs to be spotless, and of course the carpeting should be clean. Also that big artificial plant in the corner that needs no water and can’t grow to overtake the room is sure easy to take care of – so easy it’s often forgotten and never dusted.

Learning Objectives
After reading this article, the reader should be able to:
- recognize sites in the reception room that need constant attention in regard to cleanliness and infection control.
- recite some healthcare-associated infections.
- understand the CDC’s recommendations related to TB.
- survey the cleanliness of the reception area and main office through the eyes of a patient.
The Reception Room
continued from front cover

These and all horizontal surfaces need to be damp-dusted regularly.

Check out the “Practice Tip” on page 8 for suggestions about reception area cleanliness. The Centers for Disease Control and Prevention (CDC) has published guidelines for environmental infection control that relate to live plants and flowers in healthcare facilities1 (See “Putting It All Together” on pages 4-5).

Contagious disease precautions
Most people who are acutely ill and highly contagious are at home in bed or in the hospital rather than in the dental chair. However, those who look normal but are asymptomatic carriers of infectious agents are very important transmitters of disease. Also we should remember that essentially every respiratory infectious disease has some stage that is asymptomatic but contagious usually early in the infection process.

Respiratory infections can result from exposure to microbes in droplets from aerosolized oral and nasal secretions. During a cough or sneeze a cloud of larger size infectious particles (greater that 5 micrometers in diameter) is generated that can expose persons within 3 feet of the source2. These droplets settle rapidly but can be involved in direct contact transmission involving rhinoviruses (common cold viruses), influenza viruses, adenoviruses and respiratory syncytial virus. The airborne spread of microbes also can occur through the indirect transmission of droplet nuclei which are residuals of droplets that dry to produce small particles 1 to 5 micrometers. These particles can contain microbes and can remain suspended in the air indefinitely spreading such agents as Mycobacterium tuberculosis, measles virus, and some fungal agents. Thus it’s important to remind incoming patients, families and visitors to cover their mouth and nose when coughing or sneezing and practice hand hygiene. Boxes of tissues and face masks, a waste container, and alcohol hand rubs can be placed in the reception room along with signs to prompt these hygienic practices among patients, visitors and families.

While the risk of transmission of TB in a dental setting is likely very low, we can’t say its zero, because patients and dental personnel do share the same air. Since a dental practice may serve an area where TB may be present in the community, the CDC has published TB infection control recommendations that should be considered by dentistry3, 4 (see “Putting It All Together” on pages 4-5).

— OSAP
A dental office is a healthcare facility, and patients can regard everyone in the office as healthcare professionals who may be able to answer non-dental health questions. Pharmacies aren’t the only places besides medical facilities that can provide information brochures on general health! In addition to health history information and forms about the Health Insurance Portability and Accountability Act (HIPAA), your reception area can be the place to communicate a variety of things to patients including:

- the infection control aspects of the office
- “how to prevent the spread of influenza”
- “how the common cold is spread”
- “vaccinations for adults and children”
- cough etiquette

Employer

The employing dentist needs to be regularly updated about the general cleanliness of the whole office including the reception area. In addition, any problem areas that need attention involving special cleaning, repair or replacement need to be addressed with management. Office cleanliness can be included as a regularly reported topic at staff meetings to involve office team members in discussions and provide feedback to the dentist. Including one or two questions about office cleanliness on patient surveys will also provide feedback from the patient’s point of view.

Staff

You as the infection control coordinator need to:

- monitor the cleanliness of the whole office including the reception area and then to communicate the problems to management;
- periodically query the entire staff about noting/reporting any cleanliness problems they detect. This way everyone feels a personal investment in the office infection control program.
- ensure that training of the receptionist includes a reminder to note those patients, family members and visitors who have acute respiratory symptoms and point out facial tissues and alcohol hand rubs that can be placed at the reception window.
- communicate to the housekeeping staff the importance of maintaining a clean office including the reception area. Since this staff may have a frequent turnover, it’s important to maintain vigilance to assure the desired result is continuous.

Patients

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OSAP thanks the following companies that help to underwrite each issue of this special series of Infection Control In Practice in 2008.

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Recommendations

The CDC infection control recommendations related to TB are as follows:

A. General Recommendations

• Educate all dental healthcare personnel (DHCP) regarding the recognition of signs, symptoms, and transmission of TB.
• Conduct a baseline tuberculin skin test (TST), preferably by using a two-step test, for all DHCP who might have contact with persons with suspected or confirmed active TB, regardless of the risk classification of the setting.
• Assess each patient for a history of TB as well as symptoms indicative of TB and document on the medical history form.
• Follow CDC recommendations for 1) developing, maintaining, and implementing a written TB infection-control plan; 2) managing a patient with suspected or active TB; 3) completing a community risk-assessment to guide employee TSTs and follow-up; and 4) managing DHCP with TB disease.

B. The following apply to patients known or suspected of having active TB:

• Evaluate the patient away from other patients and DHCP. When not being evaluated, the patient should wear a surgical mask or be instructed to cover mouth and nose when coughing or sneezing.
• Defer elective dental treatment until the patient is non-infectious.
• Refer patients requiring urgent dental treatment to a previously identified facility with TB engineering controls and a respiratory protection program.

Healthcare-associated Infections

A new report from CDC updates previous estimates of healthcare-associated infections. In American hospitals alone, healthcare-associated infections account for an estimated 1.7 million infections and 99,000 associated deaths each year. Of these infections:

• 32 percent of all healthcare-associated infections are urinary tract infections
• 22 percent are surgical site infections
• 15 percent are pneumonia (lung infections)
• 14 percent are bloodstream infections.

According to the CDC the following are infectious diseases or microbes that may be transmitted and/or acquired in healthcare settings and therefore are possible healthcare-associated infections. This listing does not indicate that these have been spread specifically in dental offices.

• Acinetobacter
• Bloodborne pathogens
• Burkholderia cepacia
• Chickenpox (Varicella)
• Clostridium difficile

continued on page 5
Infection Control In Practice Vol. 7, No. 2 May 2008 www.OSAP.org

Putting It All Together continued . . .

continued from page 4

- Clostridium sordellii
- Creutzfeldt-Jakob Disease (CJD)
- Ebola (viral hemorrhagic fever)
- Gastrointestinal infections
- Hepatitis A, B, and C
- HIV/AIDS
- Influenza
- Methicillin-resistant Staphylococcus aureus (MRSA)
- Mumps
- Norovirus
- Parvovirus
- Poliovirus
- Pneumonia
- Rubella
- Severe Acute Respiratory Syndrome (SARS)
- Streptococcus pneumoniae (drug resistant)
- Tuberculosis
- Vancomycin-Intermediate/Resistant Staphylococcus aureus (VISA)
- Vancomycin-resistant enterococci (VRE)

Disease prevention information for patients

The “Cover your cough” picture shown on this page can be obtained on-line in enlarged flyer or poster forms from the CDC at http://www.cdc.gov/flu/protect/cover-cough.htm.

The CDC “Germ Stopper” posters or flyers on disease prevention are more suitable for children and their “Healthy Habits” sheet is for adults. They can be downloaded at: http://www.cdc.gov/germstopper/materials.htm.

CDC also has come up with a “Take 3” campaign for preventing the spread of the flu. Their message is:
1. Take time to get the vaccine.
2. Take everyday preventive measures.
3. Take antiviral drugs if your doctor says to.

This information also is available as a downloadable flyer or poster at:

These general prevention procedures also can be typed up and placed in the reception room.

- Cover your nose and mouth with a tissue when you cough or sneeze; throw the tissue away after you use it.
- Wash your hands often with soap and water, especially after you cough or sneeze. If you are not near water, use an alcohol-based hand cleaner.
- Stay away as much as you can from people who are sick.
- If you get the flu, stay home from work or school. If you are sick, do not go near other people so that you don’t make them sick.
- Try not to touch your eyes, nose, or mouth. Germs often spread this way.

Keep It Clean For Your Patients

Does the housekeeping staff:

- use vacuum cleaners that minimize dust dispersion - use HEPA filters?
- perform thorough cleaning of touch surfaces in the reception area?
- periodically clean the upholstery?
- disinfect the doorknobs?
- use fresh mop water on the non-carpeted floors?
- dust with a damp cloth to limit dust dispersion?
Do our receptionists include OSHA’s bloodborne pathogens standard? Do they have a potential for occupational exposure to blood or other infectious material such as saliva in dentistry? If yes, they need to get the training and be offered the hepatitis B vaccine and be involved with all of the OSHA rules. If there is no such potential, then this standard does not apply to them.

**Australia**
Dental professionals tend to discourage patients with coughs/colds/upper respiratory infections from attending non-emergency dental visits. Also those with herpes simplex “cold sores” around the lips/face are advised not to attend for non-emergency treatment. These exclusions are managed by the receptionists.

**Canada**
The Safer Healthcare Now! campaign is a pan-Canadian initiative developed to reduce the number of deaths and injuries in hospitals related to preventable adverse events. The five key components of evidence-based infection control practices that form the basis of successfully reducing Methacillin-Resistant Staphylococcus aureus (MRSA) transmission include:

1. An aggressive hand hygiene program.
2. A systematic program for cleaning and decontamination of the environment and equipment.
3. Use of precautions for contact with any patient that is infected with MRSA (requires healthcare workers to wear gloves, gowns, and in some cases masks when in the room or bed space of MRSA patients).
4. Selected MRSA screening surveillance cultures on admission and at other times during hospitalization if indicated.
5. Surveillance and reporting of MRSA infection rates to frontline workers and hospital leadership.

Canadian Patient Safety Institute, April 2, 2008
Dr. Nita Mazurat
University of Manitoba Canada

**Antiviral drugs**: Two flu antiviral drugs are recommended for use in the United States during the 2007-08 flu season. These are oseltamivir (brand name Tamiflu®) – see http://www.fda.gov/medwatch/safety/2006/Tamiflu_PPL.pdf and zanamivir (brand name Relenza®) – see http://www.fda.gov/cder/drug/InfoSheets/patient/ZanamivirPIS.htm.

**Direct contact transmission**: Physical transfer of microbes between an infected or colonized person and a host.

**Indirect contact transmission**: Contact between a susceptible host and a contaminated object that is not the original source of the contamination (e.g., instruments, equipment, environmental surfaces).

**MRSA**: This is the acronym for Methicillin Resistant Staphylococcus aureus. Since this bacterium also can be resistant to several antibiotics, it is sometimes referred to as Multiple Resistant Staphylococcus aureus. HA-MRSA (Hospital-Associated MRSA) refers to MRSA infections acquired in the hospital and CA-MRSA (Community-Associated-MRSA) which refers to infections in otherwise healthy people who have not been recently (within the last year) hospitalized or had a medical procedure. For more information see the CDC and OSAP web sites at:

- http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5210a1.htm
- http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5217a1.htm

**Tuberculin skin test**: This test involves putting a small amount of TB protein antigen under the top layer of skin on your inner forearm. If you have ever been infected with the TB bacterium, your skin will react to the antigens by developing a firm red bump at the site within two days.

**Glossary**

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For each question, pick the best answer.

1. Which of the following best describes “Take 3”?
   a. The daily dosage of Tamiflu  
   b. CDC’s campaign for preventing the flu  
   c. A pamphlet on TB  
   d. A string jazz group

2. In American hospitals alone, healthcare-associated infections account for an estimated ______ infections each year.
   a. 1.7 million  
   b. 170,000  
   c. 17,000  
   d. 1,700

3. Who first said “we must see microbes with our mind’s eye”?
   a. Louis Pasteur  
   b. John Molinari  
   c. Willoby D. Miller  
   d. Joseph Lister

4. Large respiratory droplets generated from a cough or a sneeze can expose a person present within _____ feet of the source.
   a. 3  
   b. 10  
   c. 15  
   d. 20

5. What U.S. governmental agency has published TB infection control recommendations for dentistry?
   a. OSHA  
   b. FDA  
   c. CDC  
   d. EPA

6. Guidelines for environmental infection control that relate to live plants and flowers in healthcare facilities have been published by:
   a. OSHA.  
   b. FDA.  
   c. CDC.  
   d. EPA.

7. A tuberculin skin test determines exposure to certain species in which genus of bacteria?
   a. Staphylococcus  
   b. Mycobacterium  
   c. Clostridium  
   d. Acinetobacter

8. Who should monitor the cleanliness of the whole dental office including the reception area and then communicate the problems to management?
   a. Housekeeping staff  
   b. Receptionist  
   c. Hygienist  
   d. Infection control coordinator

9. CDC’s “Germ Stopper” poster on disease prevention is most suitable for:
   a. children.  
   b. adults.  
   c. adults who have the flu.  
   d. dentists.

10. The Practice Tip in this issue asks infection control coordinators to act like:
     a. the employing dentist.  
     b. a hygienist.  
     c. a receptionist.  
     d. a patient.

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MAIL TO: OSAP CE  •  P.O. Box 6297  •  Annapolis, MD 21401  •  USA  •  FAX TO: 410.571.0028
Put yourself in the shoes of a patient and take a trip through the office (and bring a pen and notepad).

Start outside the office door and see if the doorknob is clean. Enter the reception room. Are there proper signs for egress/fire exits? Are the chair arms sticky? Are the upholstery, carpet and floor clean? Are all horizontal surfaces dust free? Are the leaves on that artificial plant clean? Are there any fingerprints on the reception window? Is the reception countertop spotless? Are the pens for patient use clean? Are the wall-hangings dust free and straight?

Check out the patient restroom. Is there liquid rather than bar soap and paper rather than cloth towels? Is it free of the staff’s personal items? Continue through the office on the same paths patients may take.

Are the floors clean? Is there a build-up of dirt in the corners or around edges?

Sit in all the dental chairs to see what a patient can see. Are there cobwebs on the ceiling? Are the vents and diffusers clean? Are there dead gnats or flies in the plastic fluorescent light diffusers? Are the non-touch surfaces around the chair (e.g., countertops, bracket arm, and front of the dental light) clean and dust-free?

It’s assumed that the clinical touch surfaces will be clean or covered. Is the lead apron clean?

Proceed to the check-out station and check the surrounding surfaces for cleanliness.

Proceed out the reception room door and check the cleanliness of that inside doorknob.

Follow up on any problems noted and feel good that your patients will experience a clean, healthy atmosphere in the office.

Do you have a practice tip you’d like to share with other OSAP members and subscribers? Be sure to include contact information, a jpeg photo and a 10-word bio. Thanks!