The safety culture (or culture of safety) was defined in the December 2013 issue of *Infection Control in Practice* (ICIP). It's the shared commitment of the employer and employees towards ensuring the safety of the work environment, the dental personnel and the patients. Unsafe infection control practices can cause injuries and microbial contamination that may lead to illness. In contrast, safe practices can reduce injuries and exposure of workers and patients to potentially pathogenic microbes and hazardous materials.

**TEAM HUDDLE: Who is Managing Your Safety Culture?**

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**LEARNING OBJECTIVES**

After reading this publication, the reader should be able to:
- define a safety culture.
- survey the safety climate in your dental facility.
- describe the general approach to establishing a safety culture.
The Incident

Dr. Nighdy realized that his three assistants had a total of two needlesticks and one instrument puncture in the last six weeks. One needlestick occurred when the needle was removed from an instrument tray in the sterilizing room. The other needlestick occurred when removing the uncapped needle from the syringe. The instrument puncture occurred during hand scrubbing instruments prior to packaging and sterilization.

These incidents caused Dr. N and the assistants great stress including waiting for the results of the related blood tests. When he discovered one of his assistants using bare hands to make an impression on a new patient, he decided something had to be done. In a discussion with a dentist colleague across the hall in his building, he was convinced to hire a consultant to evaluate office infection prevention procedures.

Potential Consequences

Sharps injuries can result in the spread of bloodborne diseases, infections at the injury site and significant anxiety for the injured person and employer. Dr. N’s accountant also informed Dr. N that these instances had led to charges from the local hospital for the post-exposure evaluations and follow-ups. Using bare hands for intra-oral procedures can cause dental personnel-to-
patient and patient-to-dental personnel cross-contaminations.

**Prevention and Related Recommendations**

Used anesthetic needles need to be discarded as soon as possible after use in sharps containers placed near chairside rather than placed into the instrument tray for someone else to handle.¹ Needles on anesthetic syringes need to be safely recapped before being removed from the syringe without bending or breaking them.² Contaminated instruments should be cleaned using automated equipment (ultrasonics or washers/disinfectors) rather than by hand scrubbing.²

The consultant hired by Dr. N was a member of OSAP and was well versed in the concept of a safety culture. She first had Dr. N and his entire office team take the National Institute for Occupational Safety and Health (NIOSH) survey. The results indicated that a poor safety climate existed in the office. She described a safety culture to Dr. N and his team and suggested that they work on their safety culture through:

- commitment of management to improve patient and worker safety;
- worker participation in safety planning;
- adherence to written safety guidelines and policies;
- availability of appropriate protective equipment;
- influence of group norms regarding acceptable safety practices;
- error-reporting mechanisms;
- root cause analysis of identified problems;
- employee education;
- introducing workers to a safety culture when they are first hired; and
- safety incentives.³⁶

PS: Fortunately none of the sharps injuries in Dr. N’s office led to infections. Dr. N and his team are now working diligently on their safety culture. Worker morale has greatly improved and there have been no sharps injuries for the past six months. Also, the workers feel more confident in providing a safe dental visit for each patient.

**Who Is Managing Your Safety Culture?**

In developing a culture of safety it’s important to understand the hazards that must be managed and to be aware of unsafe practices that may be occurring. A few of the more alarming unsafe practices are:

- not having complete immunizations and not knowing one’s antibody protection for hepatitis B;
- improper hand hygiene;
- not having the face mask covering the nose;
- not wearing protective eyewear;
- not wearing gloves at chairside;
- not changing into heavy gloves for instrument processing;
- passing an anesthetic syringe containing an exposed needle;
- recapping a needle two-handed;
- transporting disposable sharps to far away sharps containers;
- overfilling sharps containers;
- placing sharps in regular trash containers;
- hand-scrubbing contaminated instruments;
- using a regular terry cloth towel as a sterilization wrap;
- not maintaining good microbial quality of dental unit water;
- not monitoring the sterilization process;
- using expired supplies; and
- performing incorrect surface asepsis between patients.

The Occupational Safety and Health Administration’s (OSHA) bloodborne pathogens standard identifies hazard determination as “exposure determination” and requires employers to list all tasks and procedures in which occupational exposures occur. These procedures can be specifically addressed during the development and maintenance of the safety culture.

The broader meaning of “hazard determination” also includes activities related to patient safety, and some of those activities were listed in the December 2013 issue of Infection Control in Practice.⁷ That issue also cited several important presentations on patient safety and the safety culture given by Drs. Kalenderian, Strock, Mazurat and Acosta-Gio at the 2013 annual OSAP symposium.³

A survey for dental offices to help assess the patient safety culture has been developed⁸ as a modification of a medical office survey on patient safety culture.⁹ NIOSH, a part of the Centers for Disease Control and Prevention (CDC), also has developed a survey to assess the safety climate of healthcare facilities.⁴ See survey on page 4.
Implementation Guide

The CDC indicates that an approach to developing or improving a facility’s safety culture involves influencing the safety-related attitudes and behaviors of everyone in the office. For example:

- ensure that there is a commitment to safety at all levels of the organization, beginning with management;
- involve employees in planning and implementing activities that promote safety;
- identify and remove hazards in the work environment;
- develop communication and feedback links to increase safety awareness; and
- promote individual accountability.

Once aspects of a safety culture are in place, the various components should be periodically revisited to identify any problems. This can include error-reporting mechanisms and root cause analysis of identified problems. Root cause analysis is a problem-solving system that helps determine why a problem occurred in the first place. The root cause analysis process involves:

- defining the problem (i.e., describe the problem);
- collecting data (i.e., determine a timeline leading up to the problem to see what might have been done differently at each step);
- identifying all possible causal factors (i.e., determine how the surrounding circumstances contributed to the problem and list all possible factors that may have been involved);
- identifying the root causes (i.e., determine why the causal factors existed in order to identify the real reasons the problem occurred);
- instituting corrective actions for the identified problems (i.e., what can be done to prevent the problem from happening again; how will the solution be implemented; who is responsible for implementation; are there any risks related to the implementation); and
- acknowledging and recognizing the successes in establishing and maintaining a safety culture (e.g., awards for identifying hazardous situations, solutions to problems, the best safety poster or slogan of the month).

TEAM HUDDLE DISCUSSION GUIDE

1) In the next team huddle or staff meeting have everyone state how your facility compares with the Scenario described in Dr. N’s office. Select one hazard (e.g., a needlestick) and ask each team member how to avoid or eliminate that hazard.

2) Have everyone take the NIOSH survey below to estimate the safety climate in your office and start a discussion. A score of 9-15 indicates a poor safety climate; 16-20 indicates a fair safety climate and 21-24 indicates a good safety climate.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>New employees quickly learn that they are expected to follow good safety practices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>There are no significant compromises or shortcuts taken when worker safety is at stake.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Where I work, employees and management work together to ensure the safest possible working conditions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Employees are told when they do not follow good safety practices.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>The safety of workers is a big priority with management where I work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>I feel free to report safety violations where I work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
What’s Wrong With This Picture?
Can you identify any breach(es) in infection prevention and safety procedures in this photo? Check your answer(s) below.

**ANSWER:**
- The patient has not been provided with protective eyewear.
- The dental assistant is not wearing protective eyewear.
- The dentist and dental assistant are not wearing long sleeve protective clothing when there is a chance for body fluid contamination of the forearms.

Product Spotlight

This 8-minute DVD uses real dental professionals to highlight: 1) the cross-contamination dental workers would see if saliva were red, and 2) how controlling contamination by using personal barrier protection, safe work practices, and effective infection control products, reduces the risk of exposure.

It includes “How to Tell the Story: A Trainer’s Guide” with visual cues and talking points from the DVD, answers to common questions, a checklist of the elements of a comprehensive dental personnel training program, and lists of web resources.

If Saliva Were Red

(Video)

To order:
call 1-410-571-0003 or
go to OSAP’s online store.

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Glossary

Root cause analysis: A method of problem-solving that tries to identify the underlying reasons of faults or problems.

Safety Culture: Reflects the shared commitment of the employer and employees towards ensuring the safety of the work environment, the office personnel and the patients.

Team huddle: A short “check-in” (15 minutes or less) with all members of the team where each shares information (no long discussions - just statements) about the selected topic (e.g., the daily schedule, safety – successes, what needs work, roadblocks, priorities, complements to others).

Links to Resources


KEY TAKEAWAYS

• A safety culture encompasses the safety-related attitudes and behaviors of everyone in the office. The employer and all employees need to be involved in assessing, developing, and maintaining safety in the facility.

• Establishing a culture of safety benefits employees, the employer and patients. Employees may receive fewer work-related injuries and exposures, which will reduce the stress involved in waiting for results of blood test following exposures. The employees, along with the employer, may feel more confident in providing safe dental visits for the patients. Employers can feel good about maintaining a safe place to work and about enhancing the morale of the employees by involving them in safety-related decisions. Employers also may have fewer exposures and expenses with post-exposure medical evaluations and follow-ups and recognize fewer days employees are off work for those post-exposure evaluations. Patients benefit by being cared for by a dental team striving to provide safe dental visits.

• Use the NIOSH survey to estimate the safety climate in your facility. Then identify hazards and address their remediation.

• Make safety an important part of every team huddle. For example, identify a hazard or potential hazard and have the team address the root causes - why it may have occurred. Then state how to eliminate the hazard and how to ensure it from happening again. Always leave time for identifying new potential hazards and acknowledging successes in eliminating hazards and in promoting and maintaining the safety culture.
1. What Occupational Safety and Health Administration standard requires each dental facility to perform an exposure determination?
   a. Hazard Communication
   b. Bloodborne Pathogens
   c. Respiratory
   d. Personal Protective Equipment

2. What is a safe infection control procedure?
   a. Hand-scrubbing contaminated instruments.
   b. Recapping a needle two-handed.
   c. Placing sharps containers near chair-side.
   d. Using a terry cloth towel as a sterilization wrap.

3. What is a method of problem-solving that tries to identify the reasons for faults or problems?
   a. Safety culture development
   b. Error-reporting system
   c. Root cause analysis
   d. Team huddle practice

4. The National Institute for Occupational Safety and Health is a part of what agency?
   a. Occupational Safety and Health Administration
   b. Centers for Disease Control and Prevention
   c. Food and Drug Administration
   d. Environmental Protection Agency

5. What is the least important aspect of creating a safety culture?
   a. Adherence to written safety guidelines and policies.
   b. Worker participation in safety planning.
   c. Establishing error-reporting mechanisms.
   d. Having patients review the plan.

6. Who should be involved in creating a safety culture in a dental facility?
   a. The dental assistants and hygienists
   b. The dentist employer and the dental assistants and hygienists
   c. The dental assistants and hygienists and front office staff
   d. Everyone in the office

7. What is not a characteristic of a safety culture?
   a. Employees should never report safety violations.
   b. Employees are told when they do not follow good safety practices.
   c. New employees quickly learn that they are expected to follow good safety practices.
   d. The safety of workers is a priority with management.

8. What is an important characteristic of a team huddle?
   a. Should last at least one hour
   b. Must allow for adequate discussion of all topics
   c. Consists of the employer lecturing on a given topic
   d. Promotes the sharing of information by everyone

9. When should a used dental anesthetic needle be recapped?
   a. After removing it from the syringe.
   b. Before removing it from the syringe.
   c. Before bending it or cutting it off from the hub.
   d. Never

10. What is the safest way to dispose of a used anesthetic needle?
    a. Place it in a sharps container near chairside.
    b. Carefully remove it from the syringe and place it on the instrument tray for disposal in the sterilizing room.
    c. Let the chairside assistant immediately carry it into the sterilizing room for disposal.
    d. Recap it, bend it, or break it off from the hub and place it into the regular trash.

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TEAM HUDDLE HIGHLIGHTS

• Can you estimate the safety climate in your office?

• Are you aware of some of the unsafe practices that can occur in the office?

• Do you know how to develop and maintain a culture of safety in your office?

• Name one procedure in your office that makes you uncomfortable.

Read On!