Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care

MODULE 5 — Sharps Safety

Modules in the Slide Series

1. Introduction
2. Hand Hygiene
3. Personal Protective Equipment
4. Respiratory Hygiene/Cough Etiquette
5. **Sharps Safety (this module)**
6. Safe Injection Practices
7. Sterilization and Disinfection of Patient-Care Items and Devices
8. Environmental Infection Prevention and Control
9. Dental Unit Water Quality
10. Program Evaluation

Percutaneous Injuries Among Dental Health Care Personnel

- Defined as needlestick or cut with sharp object.
- Most involve burs, needles, and other sharp objects.
- The Occupational Safety and Health Administration (OSHA's) Bloodborne Pathogens Standard helps to protect dental health care personnel (DHCP) from blood exposure and sharps injuries.
- These injuries pose the risk of bloodborne pathogen transmission to DHCP and patients.

Sharps Safety

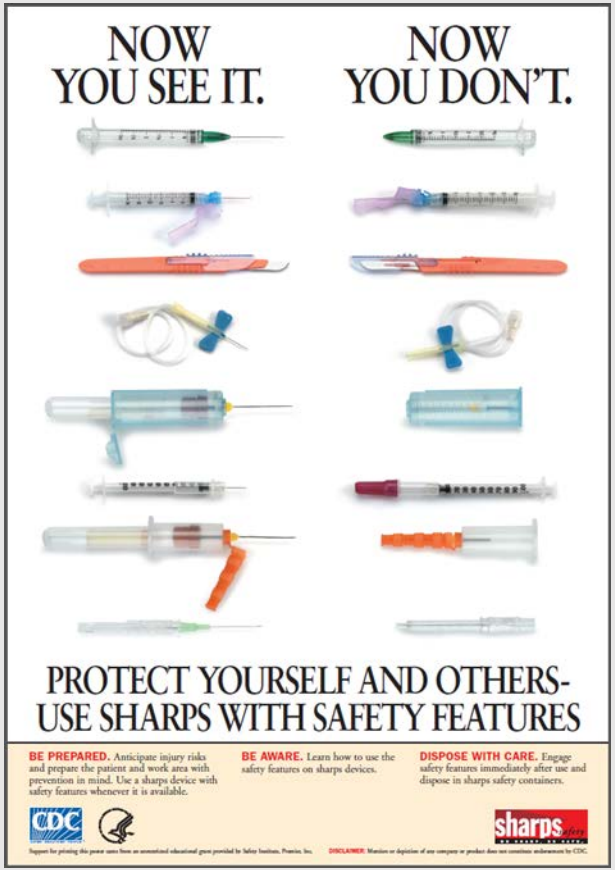
- Most exposures in dentistry are preventable.
- Each dental practice should have policies and procedures in place that address sharps safety:
  - Take precautions **while using sharps**.
  - Take precautions **during cleanup**.
  - Take precautions **during disposal**.
- **Prevention is primary.**

Engineering Controls

- Whenever possible, engineering controls should be the primary method to reduce exposure to bloodborne pathogens.
- These controls remove or isolate the hazard.
- They are frequently technology-based, for example:
  - Self-sheathing anesthetic needles, safety scalpels, and needleless IV ports.
  - Sharps containers and needle recapping devices.

Engineering Controls

- Use sharps devices that have safety features engineered into them.
- Be sure to know how to use these safety features.
- Related materials are available at Now You See It, Now You Don't



Work Practice Controls

- Change the way you perform tasks.
- Examples include:
  - Not bending or breaking needles.
  - Not passing a syringe with an unsheathed needle.
  - Removing burs before disassembling the handpiece from the dental unit.
  - Using instruments in place of fingers for tissue retraction or palpation.

Sharps Safety Practices

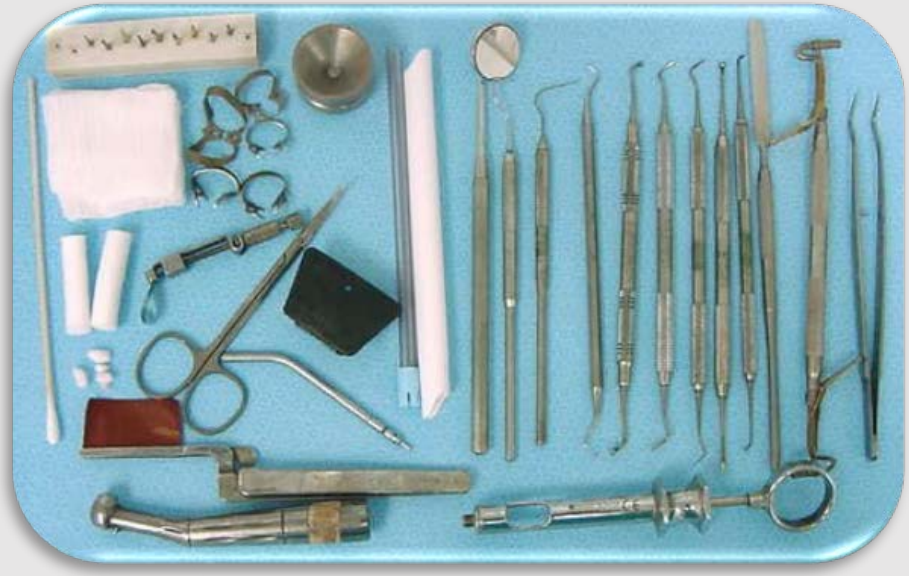
- Be Prepared
- Be Aware
- Dispose with Care

Source: Sharps Safety for Healthcare Settings Teaching Tools

Be Prepared

Before beginning a procedure:

- Organize equipment.
- Ensure adequate lighting.
- Keep sharps pointed away from user.
- Locate a sharps disposal container.



Be Aware

During a procedure:

- Maintain visual contact with sharps.
- Be aware of nearby personnel.
- Control the location of sharps to avoid injury.
- Do not pass needles unsheathed.
- Consider alerting others when passing sharps and consider a neutral zone for placing and retrieving sharps.
- Activate the safety feature of devices as soon as procedure is completed.

Source: Sharps Safety for Healthcare Settings Teaching Tools

Cleanup—Dispose with Care

- Check procedure trays and waste materials for exposed sharps before handling.
- Look for sharps and equipment left behind inadvertently.
- Transport reusable sharps in a closed, labeled container.
- Secure the container to prevent spilling contents.

Sharps Containers

- Keep hands behind sharps during disposal.
- Never put hands or fingers into sharps containers.
- Visually inspect sharps containers for overfilling.
- Replace containers before they become overfilled.

Evaluating Safety Devices

The Needlestick and Prevention Act mandated changes to the OSHA Bloodborne Pathogens Standard in 2001:

- DHCP directly responsible for patient care (e.g., dentists, hygienists, dental assistants) must identify, evaluate and select devices with engineered safety features at least annually and as they become available.

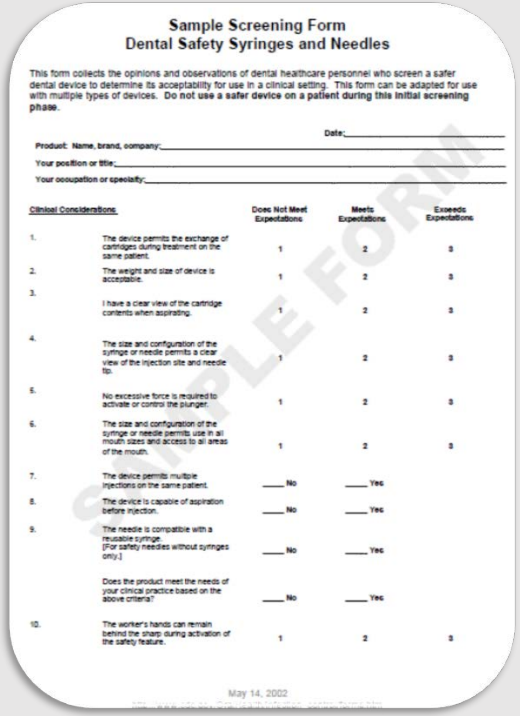
Developing Programs to Prevent Sharps Injuries

- Assign a staff person knowledgeable about or willing to be trained in injury prevention (i.e., a safety coordinator or an infection control coordinator) to:
  - Promote safety awareness.
  - Facilitate prompt reporting and postexposure management of injuries.
  - Identify unsafe work practices and devices.
  - Coordinate the selection and evaluation of safer dental devices.
  - Organize staff education and training.
  - Complete the necessary reporting forms and documentation.
  - Monitor safety performance.

Identifying Safer Dental Devices

- Developing evaluation criteria.
- Screening devices.
- Evaluating devices.

CDC Sample Screening and Device Evaluation Forms for Dentistry



Sample Screening Form
Dental Safety Syringes and Needles

This form collects the opinions and observations of dental healthcare personnel who screen a safer dental device to determine its acceptability for use in a clinical setting. This form can be adapted for use with multiple types of devices. **Do not use a safer device on a patient during this initial screening phase.**

Date:_____

Product: Name, brand, company:_____

Your position or title:_____

Your occupation or specialty:_____

Clinical Considerations		Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
1.	The device permits the exchange of cartridges during treatment on the same patient.	1	2	3
2.	The weight and size of device is acceptable.	1	2	3
3.	I have a clear view of the cartridge contents when aspirating.	1	2	3
4.	The size and configuration of the syringe or needle permits a clear view of the injection site and needle tip.	1	2	3
5.	No excessive force is required to activate or control the plunger.	1	2	3
6.	The size and configuration of the syringe or needle permits use in all mouth sizes and access to all areas of the mouth.	1	2	3
7.	The device permits multiple injections on the same patient.	____ No		____ Yes
8.	The device is capable of aspiration before injection.	____ No		____ Yes
9.	The needle is compatible with a reusable syringe. [For safety needles without syringes only.]	____ No		____ Yes
	Does the product meet the needs of your clinical practice based on the above criteria?	____ No		____ Yes
10.	The worker's hands can remain behind the sharp during activation of the safety feature.	1	2	3

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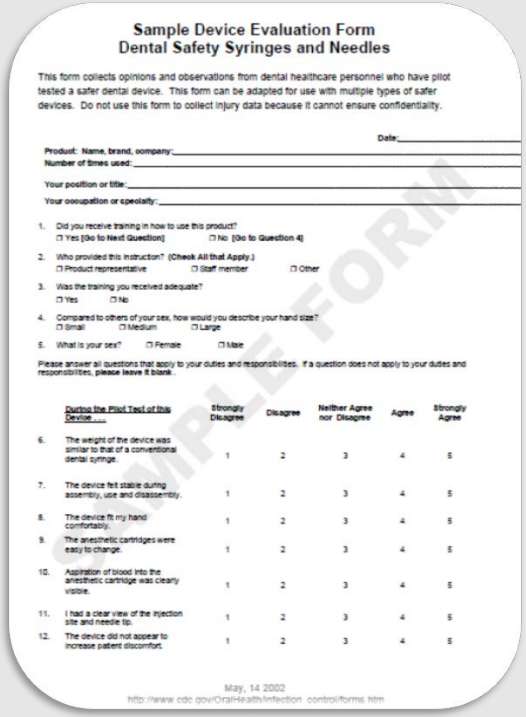

Sample Device Evaluation Form
Dental Safety Syringes and Needles

This form collects opinions and observations from dental healthcare personnel who have pilot tested a safer dental device. This form can be adapted for use with multiple types of safer devices. Do not use this form to collect injury data because it cannot ensure confidentiality.

Date:_____

Product: Name, brand, company:_____

Number of times used:_____

Your position or title:_____

Your occupation or specialty:_____

1. Did you receive training in how to use this product?
   ☐ Yes [Go to Next Question] ☐ No [Go to Question 4]
2. Who provided this instruction? **(Check All that Apply.)**
   ☐ Product representative ☐ Staff member ☐ Other
3. Was the training you received adequate?
   ☐ Yes ☐ No
4. Compared to others of your sex, how would you describe your hand size?
   ☐ Small ☐ Medium ☐ Large
5. What is your sex? ☐ Female ☐ Male

Please answer all questions that apply to your duties and responsibilities. If a question does not apply to your duties and responsibilities, **please leave it blank**.

During the Pilot Test of this Device ...		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
6.	The weight of the device was similar to that of a conventional dental syringe.	1	2	3	4	5
7.	The device felt stable during assembly, use and disassembly.	1	2	3	4	5
8.	The device fit my hand comfortably.	1	2	3	4	5
9.	The anesthetic cartridges were easy to change.	1	2	3	4	5
10.	Aspiration of blood into the anesthetic cartridge was clearly visible.	1	2	3	4	5
11.	I had a clear view of the injection site and needle tip.	1	2	3	4	5
12.	The device did not appear to increase patient discomfort.	1	2	3	4	5

May, 14 2002
http://www.cdc.gov/OralHealth/infection_control/forms.htm

Source: Sample Screening and Device Evaluation Forms for Dentistry

Occupational Exposure Incident

- Percutaneous injury:
  - Needlestick, puncture wound, or cut.
- Splash of blood or body fluid onto:
  - Mucous membranes of the eyes, nose, or mouth.
  - Non-intact skin (e.g., chapped, abraded, dermatitis).

Postexposure Management Program

- Clear policies and procedures.
- Education of DHCP.
- Rapid access to qualified health care professional who can provide:
  - Clinical care.
  - Postexposure prophylaxis (PEP).
  - Testing of source patients and DHCP.

Postexposure Management

- Wound management.
- Exposure reporting.
- Assessment of infection risk:
  - Type and severity of exposure.
  - Bloodborne pathogen status of source person.
  - Susceptibility of exposed person.

Sharps Safety Resources

- CDC. *Guidelines for Infection Control in Dental Health-Care Settings–2003*
- CDC. Oral Health website. Screening and Evaluating Safer Dental Devices
- CDC. National Institute for Occupational Safety and Health. Bloodborne Infectious Diseases website. HIV/AIDS, Hepatitis B, Hepatitis C: Preventing Needlesticks and Sharps Injuries
- CDC. Sharps Safety for Healthcare Settings website
- CDC. *Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care*

End of Module 5

For more information, contact Centers for Disease Control and Prevention (CDC).
1-800-CDC-INFO (232-4636)
TTY:1-888-232-6348 • Centers for Disease Control and Prevention (CDC)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the CDC.