INFECTION CONTROL
For The Dental Team

BUFFALO NIAGARA DENTAL MEETING

Wed., Sept. 25 3-6 P.M.
Thurs., Sept. 26 8:45-11:45 A.M.

Frank Barnashuk, DDS
FB2@Buffalo.edu

ADA NEWS
APRIL 15, 2013

FOCUS ON OKLAHOMA ORAL SURGEON PUTS SPOTLIGHT ON INFECTION CONTROL IN DENTISTRY

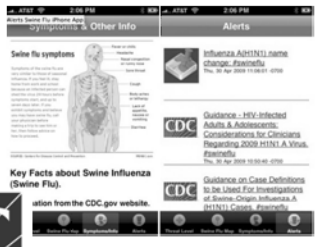
POTENTIAL CONSEQUENCES FOR US

- Increased Questions From Patients
- Potential for Increased Vigilance/Inspections by OSHA, State Boards and State Health Departments
- Hopefully: Increased Awareness/Action by us to "Do the Right Things"

OTHER RECENT CASES-2013

- Rhode Island
- Pennsylvania
- D.C.
- Maine (Whistleblower")

WWW.CDC.GOV



CDC CENTERS FOR DISEASE CONTROL AND PREVENTION

Infection Control Program Goals

Provide a safe working environment

- **Reduce health care-associated infections**
- **Reduce occupational exposures**

ADA Sept 2009-POSTER

Basic Principles of Infection Control

Always Use Standard Precautions

1. Immunize against vaccine-preventable diseases
2. Perform effective hand hygiene
3. Use Personal Protective Equipment
4. Heat sterilize all reusable patient care items used intraoraly
5. Use Respiratory Hygiene/Cough Etiquette
6. Prevent cross contamination with environmental asepsis and aseptic technique
7. Prevent sharps injuries by using engineering controls and safe work practices

INFECTION CONTROL

JADA May 2003
Guarding Against Disease

- John Molinari, Ph.D.
- A History of the Evolution of Our Current Guidelines

INFECTION CONTROL

OSAP
Organization for Safety and Prevention

For more information on OSAP, the OSAP Foundation, and available products and services, visit

www.osap.org

Organization for Safety & Asepsis Procedures
P.O. Box 6297 ◆ Annapolis, MD 21401
1-800-298-OSAP (6727) ◆ 410-571-0003 ◆ FAX 0028
Email: *office@osap.org*

OSAP
Dentistry's Resource
for Infection Control & Safety

INFECTION CONTROL

OBJECTIVES

- Satisfy the Core Elements of NY State Required Training in Infection Control and Obtain 4-Year Training Certificate
- Understand OSHA Standards & Requirements
- Understand CDC Recommendations
- How to Comply with Requirements in as Practical Way as Possible
- Provide a Safe Working & Treatment Environment

INFECTION CONTROL

NY State Core Element I

The responsibility to adhere to scientifically accepted principles and practices of infection control and to monitor the performance of those for whom the professional is responsible

INFECTION CONTROL

NY State Core Element II

Modes & mechanisms of transmission of pathogenic organisms in the healthcare setting and strategies for prevention and control

INFECTION CONTROL

NY State Core Element III

Use of engineering and work practice controls to reduce the opportunity for patient and healthcare worker contact with potentially infectious material or bloodborne pathogens

NY State Core Element IV

Selection & use of barriers and/or personal protective equipment for preventing patient & healthcare worker contact with potentially infectious material

NY State Core Element V

Creation & maintenance of a safe environment for patient care through application of infection control principles and practices for cleaning, disinfection and sterilization

NY State Core Element VI

Prevention & management of infectious or communicable diseases in healthcare workers

Infection control training is mandated every four (4) years for dentists and dental hygienists licensed in New York State.

Failure to follow scientifically accepted infection control techniques is “unprofessional conduct” in New York State.

OSHA STANDARDS

- Bloodborne Pathogens, 1991
- Hazard Communication Standard
- Others

INFECTION CONTROL

OSHA Poster 3165

- WWW.OSHA.GOV/ PUBLICATIONS/ POSTER

INFECTION CONTROL

Infection Control Checklist as required by OSHA BB Pathogens Standard

- Exposure Control Plan and Other Written Documents
- Training of the Office Staff
- Hepatitis B Vaccination
- Postexposure Medical Evaluation & Follow-Up
- General Methods and Aseptic Techniques

INFECTION CONTROL

OSHA Checklist Continued (BB Pathogens)

- Protective Barriers
- Management of Regulated Waste
- Decontamination
- Instrument Processing
- Laboratory Asepsis
- Radiographic Asepsis
- Record Keeping

INFECTION CONTROL

Components of OSHA HazCom Standard

- Hazard Determination
- Written Hazard Communication Program
- Inventory & List Hazardous Chemicals
- Labels & Other Forms of Warning
- MSDS
- Employee Information & Training
- New Rules Roll Out between 12.1.13 and 6.1.15 (Pictograms)

INFECTION CONTROL

Guidelines for Infection Control in Dental Health-Care Settings 2003

CDC. *MMWR* 2003;52(No. RR-17)
http://www.cdc.gov/oralhealth/infectioncontrol/guidelines/index.htm

INFECTION CONTROL

SUMMARY
CDC 2003 Recommendations

- Personnel Health Elements
- Prevention of Transmission of BB Pathogens
- Prevention of Exposures to Blood & Other Potentially Infectious Material
- Hand Hygiene
- PPE
- Contact Dermatitis & Latex Hypersensitivity

INFECTION CONTROL

CDC Recommendations Cont'd

- Sterilization & Disinfection of Patient Care Items
- Environmental Infection Control
- Dental Unit Waterlines (DUWL), Biofilms, and Water Quality
- Boil-Water Notices
- Dental Handpieces & Other Devices Attached to Air & Water Lines

INFECTION CONTROL

CDC Recommendations Cont'd

- Dental Radiology
- Aseptic Technique for Parenteral Medications
- Single-Use (Disposable) Devices
- Oral Surgical Procedures
- Handling of Extracted Teeth
- Dental Lab
- TB
- Program Evaluation

INFECTION CONTROL

Why Is Infection Control Important in Dentistry?

- Both patients and dental health care personnel (DHCP) can be exposed to pathogens
- Contact with blood, oral and respiratory secretions, and contaminated equipment occurs
- Proper procedures can prevent transmission of infections among patients and DHCP

INFECTION CONTROL

Modes of Transmission

- Direct contact with blood or body fluids
- Indirect contact with a contaminated instrument or surface
- Contact of mucosa of the eyes, nose, or mouth with droplets or spatter
- Inhalation of airborne microorganisms

INFECTION CONTROL

PATHOGENS

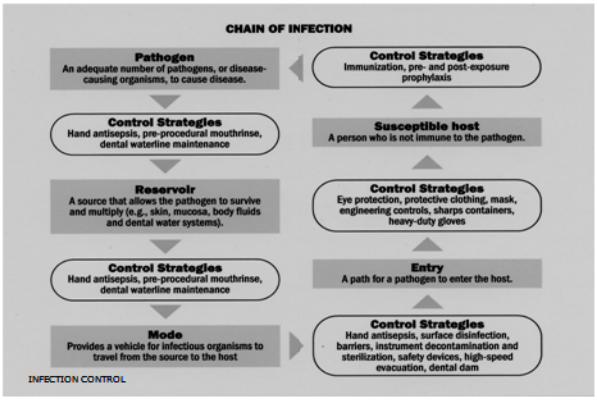
Pathogens are microorganisms that can cause disease in human

EXAMPLES:

- Virus: Hepatitis, HSV, HIV, Influenza
- Bacteria: Anthrax, Staph, Strep, ANUG, TB, Lyme Disease
- Fungi: Candidiasis, Ringworm

INFECTION CONTROL

OSAP Chain of Infection



INFECTION CONTROL

PORTALS OF EXIT

- Coughing
- Sneeze
- Oral Draining Lesion
- Draining Skin Lesion

INFECTION CONTROL

MODES OF TRANSMISSION

- Air
- Bloodborne
- Ingestion
- Direct Contact
- Indirect Contact

INFECTION CONTROL

Standard Precautions

- Apply to <u>all</u> patients
- Integrate and expand Universal Precautions to include organisms spread by blood and also
  - Body fluids, secretions, and excretions except sweat, whether or not they contain blood
  - Non-intact (broken) skin
  - Mucous membranes

INFECTION CONTROL

Elements of Standard Precautions

- Handwashing
- Use of gloves, masks, eye protection, and gowns
- Patient care equipment
- Environmental surfaces
- Injury prevention

INFECTION CONTROL

Personnel Health Elements of an Infection Control Program

- Education and training
- Immunizations
- Exposure prevention and postexposure management
- Medical condition management and work-related illnesses and restrictions
- Health record maintenance

INFECTION CONTROL

Bloodborne Pathogens

Preventing Transmission of Bloodborne Pathogens

Bloodborne viruses such as hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV)

- Are transmissible in health care settings
- Can produce chronic infection
- Are often carried by persons unaware of their infection

Factors Influencing Occupational Risk of Bloodborne Virus Infection

- Frequency of infection among patients
- Risk of transmission after a blood exposure (i.e., type of virus)
- Type and frequency of blood contact

Average Risk of Bloodborne Virus Transmission after Needlestick

Source	Risk
HBV	
$HBsAg^+$ and $HBeAg^+$	**22.0%-31.0% clinical hepatitis; 37%-62% serological evidence of HBV infection**
$HBsAg^+$ and $HBeAg^-$	**1.0%-6.0% clinical hepatitis; 23%-37% serological evidence of HBV infection**
HCV	**1.8% (0%-7% range)**
HIV	**0.3% (0.2%-0.5% range)**

PATIENT-TO-PATIENT
Hepatitis-B Transmission 2001

- **Journal of Infectious Diseases**
- 2007;195:1311-1314 (21 March, 2007)
- 2 multiple-Exo Pts. Treated 161 min. apart

2009

- Hepatitis B associated with a Mission of Mercy Dental Clinic

Estimated Incidence of HBV Infections Among HCP and General Population, United States, 1985-1999

INFECTION CONTROL

Hepatitis B Vaccine

- Vaccinate all DHCP who are at risk of exposure to blood (must offer within 10 days of initial assignment at no cost)
- Provide access to qualified health care professionals for administration and follow-up testing
- Test for anti-HBs 1 to 2 months after 3rd dose

INFECTION CONTROL

DECLINATION

Employees refusing Hepatitis B vaccination must sign a declination form

Employee must still be provided vaccination at no cost if decide in future that they want it after declination

INFECTION CONTROL

Transmission of HBV from Infected DHCP to Patients

- Nine clusters of transmission from dentists and oral surgeons to patients, 1970–1987
- Eight dentists tested for HBeAg were positive
- Lack of documented transmissions since 1987 may reflect increased use of gloves and vaccine
- One case of patient-to-patient transmission, 2003

INFECTION CONTROL

HCV Infection in Dental Health Care Settings

- Prevalence of HCV infection among dentists similar to that of general population (~ 1%-2%)
- No reports of HCV transmission from infected DHCP to patients or from patient to patient
- Risk of HCV transmission appears very low

INFECTION CONTROL

Transmission of HIV from Infected Dentists to Patients

- Only one documented case of HIV transmission from an infected dentist to patients
- No transmissions documented in the investigation of 63 HIV-infected HCP (including 33 dentists or dental students)

INFECTION CONTROL

Risk Factors for HIV Transmission after Percutaneous Exposure to HIV-Infected Blood
CDC Case-Control Study

- Deep injury
- Visible blood on device
- Needle placed in artery or vein
- Terminal illness in source patient

Source: Cardo, et al., *N England J Medicine* 1997;337:1485-90.

Characteristics of Percutaneous Injuries Among DHCP

- Reported frequency among general dentists has declined
- Caused by burs, syringe needles, other sharps
- Occur outside the patient's mouth
- Involve small amounts of blood
- Among oral surgeons, occur more frequently during fracture reductions and procedures involving wire

Exposure Prevention Strategies

- Engineering controls
- Work practice controls
- Administrative controls

Engineering Controls

- Isolate or remove the hazard
- Examples:
  - Sharps container
  - Medical devices with injury protection features (e.g., self-sheathing needles)

Work Practice Controls

- Change the manner of performing tasks
- Examples include:
  - Using instruments instead of fingers to retract or palpate tissue
  - One-handed needle recapping

Administrative Controls

- Policies, procedures, and enforcement measures
- Placement in the hierarchy varies by the problem being addressed
  - Placed before engineering controls for airborne precautions (e.g., TB)

OSHA BB PATHOGENS STANDARD Compliance Steps

- Review the Standard
- Prepare Written Exposure Control Plan
- Train Employees
- Maintain Records
- Provide Employees for Compliance:
  - Hep B Vaccination
  - PPE & Engineering Controls
  - Establish Work Practices & Decontamination Procedures
  - Post Exposure Plan
  - Provide Biohazard Communication

INFECTION CONTROL

EXPOSURE CONTROL PLAN

- OSHA requires exposure determination by employee position (High v. Low Risk)
- The Plan is available to employees and OSHA
- Plan includes documented annual (and new employee) training

INFECTION CONTROL

WRITTEN EXPOSURE CONTROL PLAN

1. Exposure Determination/Who is Covered?
2. Schedule of Implementation (How/When)
   - Communication of Hazards to Employees
   - Hep B Vaccination
   - Post Exposure Evaluation & Follow Up
   - Record Keeping
   - Methods of Compliance (Engineering, Work Practice Controls, PPE, Housekeeping)

INFECTION CONTROL

EXP CONTROL PLAN (cont'd)

3. Evaluation of Exposure Incidents
4. Prevention of Sharps Injuries
   - Describe how newer devices that may reduce exposure will be ID'd and considered for use
   - Describe methods to evaluate the devices & results of the evaluations
   - Describe justification as to why/why not a device is selected for use
   - Describe how those directly involved in patient care are involved in this ID, evaluation & selection process

INFECTION CONTROL

Post-exposure Management Program

- Clear policies and procedures
- Education of dental health care personnel (DHCP)
- Rapid access to
  - Clinical care
  - Post-exposure prophylaxis (PEP)
  - Testing of source patients/HCP

INFECTION CONTROL

Post-exposure Management

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

INFECTION CONTROL

Hand Hygiene

Why Is Hand Hygiene Important?

-Hands are the most common mode of pathogen transmission

-Reduce spread of antimicrobial resistance

-Prevent health care-associated infections

Hands Need to be Cleaned When:

- Visibly dirty
- After touching contaminated objects with bare hands
- Before and after patient treatment (before glove placement and after glove removal)

Hand Hygiene Definitions

- Handwashing
  - Washing hands with plain soap and water
- Antiseptic handwash
  - Washing hands with water and soap or other detergents containing an antiseptic agent
- Alcohol-based handrub
  - Rubbing hands with an alcohol-containing preparation
- Surgical antisepsis
  - Handwashing with an antiseptic soap or an alcohol-based handrub before operations by surgical personnel

PERSONAL PROTECTIVE EQUIPMENT

- A major component of Standard Precautions
- Protects the skin and mucous membranes from exposure to infectious materials in spray or spatter
- Should be removed when leaving treatment areas
- No cost to employee

Masks, Protective Eyewear, Face Shields

- Wear a surgical mask and either eye protection with solid side shields or a face shield to protect mucous membranes of the eyes, nose, and mouth
- Change masks between patients
- Clean reusable face protection between patients; if visibly soiled, clean and disinfect

Protective Clothing

- Wear gowns, lab coats, or uniforms that cover skin and personal clothing likely to become soiled with blood, saliva, or infectious material
- Change if visibly soiled
- Remove all barriers before leaving the work area

Gloves

- Minimize the risk of health care personnel acquiring infections from patients
- Prevent microbial flora from being transmitted from health care personnel to patients
- Reduce contamination of the hands of health care personnel by microbial flora that can be transmitted from one patient to another
- Are not a substitute for handwashing!

Recommendations for Gloving

- Wear gloves when contact with blood, saliva, and mucous membranes is possible
- Remove gloves after patient care
- Wear a new pair of gloves for each patient

Latex Hypersensitivity and Contact Dermatitis

Latex Allergy

- Type I hypersensitivity to natural rubber latex proteins
- Reactions may include nose, eye, and skin reactions
- More serious reactions may include respiratory distress–rarely shock or death

Contact Dermatitis

- Irritant contact dermatitis
  - Not an allergy
  - Dry, itchy, irritated area
- Allergic contact dermatitis
  - Type IV delayed hypersensitivity
  - May result from allergy to chemicals used in glove manufacturing

Sterilization and Disinfection of Patient Care Items

Critical Instruments

- Penetrate mucous membranes or contact bone, the bloodstream, or other normally sterile tissues (of the mouth)
- Heat sterilize between uses or use sterile single-use, disposable devices
- Examples include surgical instruments, scalpel blades, periodontal scalers, and surgical dental burs

Semi-critical Instruments

- Contact mucous membranes but do not penetrate soft tissue
- Heat sterilize or high-level disinfect
- Examples: Dental mouth mirrors, amalgam condensers, and dental handpieces

Noncritical Instruments and Devices

- Contact intact skin
- Clean and disinfect using a low to intermediate level disinfectant
- Examples: X-ray heads, facebows, pulse oximeter, blood pressure cuff

Automated Cleaning

- Ultrasonic cleaner
- Instrument washer
- Washer-disinfector

Manual Cleaning

- Soak until ready to clean
- Wear heavy-duty utility gloves, mask, eyewear, and protective clothing

Preparation and Packaging

- Critical and semi-critical items that will be stored should be wrapped or placed in containers before heat sterilization
- Hinged instruments opened and unlocked
- Place a chemical indicator inside the pack
- Wear heavy-duty, puncture-resistant utility gloves

Heat-Based Sterilization

- Steam under pressure (autoclaving)
  - Gravity displacement
  - Pre-vacuum
- Dry heat
- Unsaturated chemical vapor

Sterilization Monitoring Types of Indicators

- Mechanical
  - Measure time, temperature, pressure
- Chemical
  - Change in color when physical parameter is reached
- Biological (spore tests)
  - Use biological spores to assess the sterilization process directly

Environmental Infection Control

Environmental Surfaces

- May become contaminated
- Not directly involved in infectious disease transmission
- Do not require as stringent decontamination procedures

Categories of Environmental Surfaces

- Clinical contact surfaces
  - High potential for direct contamination from spray or spatter or by contact with DHCP's gloved hand
- Housekeeping surfaces
  - Do not come into contact with patients or devices
  - Limited risk of disease transmission

Intermediate Level Disinfectants

General Cleaning Recommendations

- Use barrier precautions (e.g., heavy-duty utility gloves, masks, protective eyewear) when cleaning and disinfecting environmental surfaces
- Physical removal of microorganisms by cleaning is as important as the disinfection process
- Follow manufacturer's instructions for proper use of EPA-registered hospital disinfectants
- Do not use sterilant/high-level disinfectants on environmental surfaces

Cleaning Clinical Contact Surfaces

- Risk of transmitting infections greater than for housekeeping surfaces
- Surface barriers can be used and changed between patients

OR

- Clean then disinfect using an EPA-registered low- (HIV/HBV claim) to intermediate-level (tuberculocidal claim) hospital disinfectant

Cleaning Housekeeping Surfaces

- Routinely clean with soap and water or an EPA-registered detergent/hospital disinfectant routinely
- Clean mops and cloths and allow to dry thoroughly before re-using
- Prepare fresh cleaning and disinfecting solutions daily and per manufacturer recommendations

FOOD & DRINK

Eating, Drinking, Application of Make-up & Handling of Contact Lenses is Prohibited in areas where there is a reasonable likelihood of Occupational Exposure

- Direct from OSHA BB Pathogens Standard

Medical Waste

- Medical Waste: Most waste we generate is not considered infectious, thus can be discarded in regular trash
- Regulated Medical Waste: Poses a potential risk of infection during handling and disposal

REGULATED WASTE

- Liquid or Semi-Liquid Blood or OPIM
- Contaminated Items that would Release Blood or OPIM if Compressed
- Items Caked with Dried Blood/OPIM
- Contaminated Sharps
- Extracted Teeth/Tissues

Dental Unit Waterlines, Biofilm, and Water Quality

Dental Unit Waterlines and Biofilm

- Microbial biofilms form in small bore tubing of dental units
- Biofilms serve as a microbial reservoir
- Primary source of microorganisms is municipal water supply

Dental Unit Water Quality

- CDC: Using water of uncertain quality is inconsistent with infection control principles
  (See NYS CORE ELEMENT #1)
- Colony counts in water from untreated systems can exceed 1,000,000 CFU/mL
  CFU=colony forming unit
- Untreated dental units cannot reliably produce water that meets drinking water standards

Dental Water Quality

For routine dental treatment, meet regulatory standards for drinking water.*

* <500 CFU/mL of heterotrophic water bacteria

Available DUWL Technology

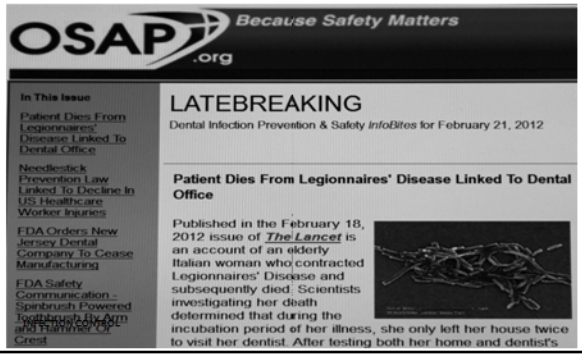
- Independent reservoirs
- Chemical treatment
- Filtration
- Combinations
- Sterile water delivery systems

Monitoring Options

- Water testing laboratory
- In-office testing with self-contained kits
- Follow recommendations provided by the manufacturer of the dental unit or waterline treatment product for monitoring water quality

INFECTION CONTROL

LANCET: February 2012


OSAP.org Because Safety Matters

In This Issue

Patient Dies From Legionnaires' Disease Linked To Dental Office

Needlestick Prevention Law Linked To Decline In US Healthcare Worker Injuries

FDA Orders New Jersey Dental Company To Cease Manufacturing

FDA Safety Communication - Spinbrush Powered Toothbrush By Arm and Hammer Or Crest

LATEBREAKING

Dental Infection Prevention & Safety *InfoBites* for February 21, 2012

Patient Dies From Legionnaires' Disease Linked To Dental Office

Published in the February 18, 2012 issue of *The Lancet* is an account of an elderly Italian woman who contracted Legionnaires' Disease and subsequently died. Scientists investigating her death determined that during the incubation period of her illness, she only left her house twice to visit her dentist. After testing both her home and dentist's

Sterile Irrigating Solutions

- Use sterile saline or sterile water as a coolant/irrigator when performing surgical procedures
- Use devices designed for the delivery of sterile irrigating fluids

INFECTION CONTROL

Special Considerations

- Dental handpieces and other devices attached to air and waterlines
- Dental radiology
- Aseptic technique for parenteral medications
- Single-use (disposable) Devices
- Preprocedural mouth rinses
- Oral surgical procedures
- Handling biopsy specimens
- Handling extracted teeth
- Laser/electrosurgery plumes or surgical smoke
- Dental laboratory
- *Mycobacterium tuberculosis*
- Creutzfeldt-Jacob Disease (CJD) and other prion-related diseases

INFECTION CONTROL

Precautions for Parenteral Medications

- IV tubings, bags, connections, needles, and syringes are single-use, disposable
- Single dose vials
  - Do not administer to multiple patients even if the needle on the syringe is changed
  - Do not combine leftover contents for later use

INFECTION CONTROL

Single-Use (Disposable) Devices

- Intended for use on one patient during a single procedure
- Usually not heat-tolerant
- Cannot be reliably cleaned
- Examples: Syringe needles, prophylaxis cups, and plastic orthodontic brackets

INFECTION CONTROL

Oral Surgical Procedures

- Present a risk for microorganisms to enter the body
- Involve the incision, excision, or reflection of tissue that exposes normally sterile areas of the oral cavity
- Examples:
  - Biopsy
  - Perio surgery
  - Implant surgery
  - Apical surgery
  - Surgical extractions

INFECTION CONTROL

Precautions for Surgical Procedures

Surgical Scrub

Sterile Surgeon's Gloves

Sterile Irrigating Solutions

INFECTION CONTROL

CDC Guidelines for IC in Dental Healthcare Settings-2003 (p29)

- Sterile solutions (sterile saline or sterile water) should be used as coolant/irrigation in the performance of oral surgical procedures……..

  conventional dental units cannot reliably deliver sterile water even when equipped with independent water reservoirs

INFECTION CONTROL

Dental Laboratory

- Dental prostheses, appliances, and items used in their making are potential sources of contamination
- Handle in a manner that protects patients and DHCP from exposure to microorganisms

INFECTION CONTROL

Dental Laboratory

- Clean and disinfect prostheses and impressions
- Wear appropriate PPE until disinfection has been completed
- Clean and heat sterilize heat-tolerant items used in the mouth
- Communicate specific information about disinfection procedures

INFECTION CONTROL

Transmission of *Mycobacterium tuberculosis*

- Spread by droplet nuclei (airborne)
- Highly contagious
- Immune system usually prevents spread (10% infected develop TB)
- Bacteria can remain alive in the lungs for many years (latent TB infection)

INFECTION CONTROL

Risk of TB Transmission in Dentistry

- Risk in dental settings is low
- Only one documented case of transmission
- Tuberculin skin test conversions among DHP are rare

INFECTION CONTROL

Preventing Transmission of TB in Dental Settings

- Assess patients for history of TB
- Defer elective dental treatment
- If patient must be treated:
  - DHCP should wear N-95 face mask
  - Separate patient from others/mask/tissue
  - Refer to facility with proper TB infection control precautions

INFECTION CONTROL

Creutzfeldt-Jakob Disease (CJD) and other Prion Diseases

- A type of a fatal degenerative disease of central nervous system
- Caused by abnormal "prion" protein
- Human and animal forms
- Long incubation period
- One case per million population worldwide

INFECTION CONTROL

Infection Control for Known CJD or vCJD Dental Patients

- Use single-use disposable items and equipment
- Consider items difficult to clean (e.g., endodontic files, broaches) as single-use disposable
- Keep instruments moist until cleaned
- Clean and autoclave at 134°C for 18 minutes
- Do not use flash sterilization

INFECTION CONTROL

Program Evaluation

"Systematic way to improve (infection control) procedures so they are useful, feasible, ethical, and accurate"

- **Develop standard operating procedures**
- **Evaluate infection control practices**
- **Document adverse outcomes**
- **Document work-related illnesses**
- **Monitor health care-associated infections**

INFECTION CONTROL

Program Evaluation

- **Strategies and Tools**
  - **Periodic observational assessments**
  - **Checklists to document procedures**
  - **Routine review of occupational exposures to bloodborne pathogens**

INFECTION CONTROL

RESOURCES

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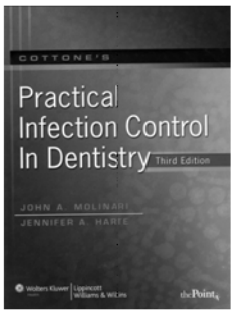

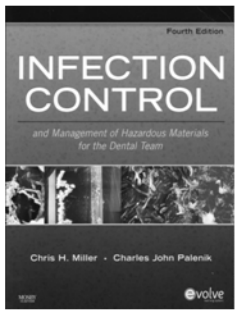

RESOURCES

- www.cdc.gov
- www.apic.org
- www.osha.gov
- www.fda.gov
- www.dec.state.ny.us
- www.biofilmsonline.com

RESOURCES

- www.ada.org
- www.adacatalog.org
- www.aami.org
- www.nysdental.org

ULTIMATE GOAL of DENTAL INFECTION CONTROL

"……strengthen an already admirable record of safe dental practice"

-CDC 2003