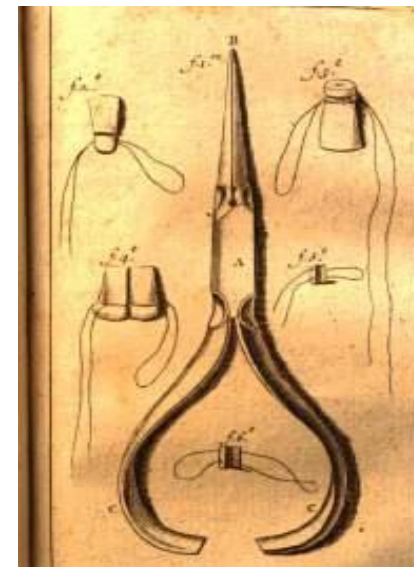


*16. Kongres stomatologa Srbije sa medjunarodnim učešćem
21-23.09.2017.godine.*

ZNAČAJ PROTOKOLA PRANJA I STERILIZACIJE INSTUMENATA U STOMATOLOGIJI

Vesna Mioljević MD, PhD

16. Kongres stomatologa Srbije sa medjunarodnim učešćem 21-23.09.2017.godine.



Najstariji pisani dokumenti vezani za početke stomatologije su [staroegipatski](#) papirusi nastali oko 3000. godine p. n. e, na kojima se vidi da je u to vreme postojala zubna medicina kao posebna grana [medicine](#). Jedan zakonik iz 1700. godine p. n. e. svedoči da je praksa zubne medicine bila regulisana [zakonom](#), a na tzv. [Ebersovom papirusu](#) se spominju pojedine bolesti zuba i uzroci [zubobolje](#). [Asirci](#) i [Vavilonci](#) su poznavali morfologiju zuba i anatomiju [usne šupljine](#), ali su verovali da su [crvi](#) odgovorni za propadanje zuba (to je jedna od najstarijih teorija o nastanku [karijesa](#)

*16. Kongres stomatologa Srbije sa medjunarodnim učešćem
21-23.09.2017.godine.*



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

Basic Expectations for Safe Care

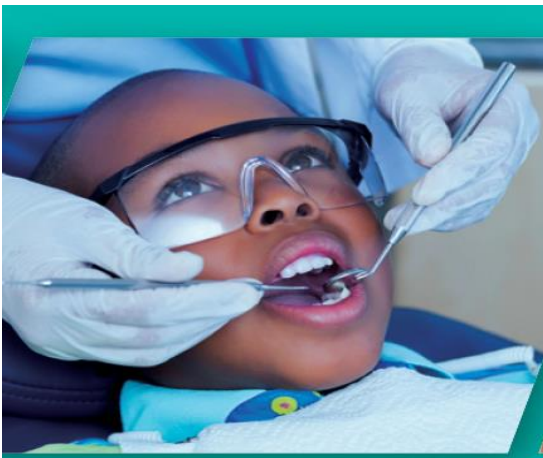
Centers for Disease Control and Prevention. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Oral Health; March 2016.

Adapted from: Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care
<http://www.cdc.gov/hai/settings/outpatient/outpatient-care-guidelines.htm>



**Centers for Disease
Control and Prevention**
National Center for Chronic
Disease Prevention and
Health Promotion

Dokumentovano prenošenje infekcije hepatits C i B i HIV virusa u stomatološkoj praksi



Transmission of infectious agents among patients and dental health care personnel (DHCP) in dental settings is rare.

However, from 2003 to 2015, transmissions in dental settings, including patient-to-patient transmissions, have been documented. 1–4

1. Redd JT, Baumbach J, Kohn W, et al. Patient-to-patient transmission of hepatitis B virus associated with oral surgery. *J Infect Dis.* 2007;195(9):1311–1314.
2. Radcliffe RA, Bixler D, Moorman A, et al. Hepatitis B virus transmissions associated with a portable dental clinic, West Virginia, 2009. *J Am Dent Assoc.* 2013;144(10):1110–1118.
3. Oklahoma State Department of Health. Dental Healthcare-Associated Transmission of Hepatitis C: Final Report of Public Health Investigation and Response, 2013. Available at: http://www.ok.gov/health2/documents/Dental%20Healthcare_Final%20Report_2_17_15.pdf.
4. Kleven RM, Moorman AC. Hepatitis C virus: an overview for dental health care providers. *J Am Dent Assoc.* 2013;144(12):1340–1347.
5. Centers for Disease Control and Prevention. Guidelines for infection control in dental health-care settings—2003. *MMWR Recomm Rep* 2003;52(RR-17):1–61. Available at: www.cdc.gov/mmwr/PDF/rr/rr5217.pdf.

Dokumentovano prenošenje infekcije hepatitis B virusa u stomatološkoj praksi

| Date, time | Surgeon A | | | | | Surgeon B | | | | |
|----------------------------|---|----------|----------|--------------|-------|---|-----------|----------|--------------|-------|
| | History of HBV vaccination ^a | Anti-HBs | Anti-HBc | IgM anti-HBc | HBsAg | History of HBV vaccination ^a | Anti-HBs | Anti-HBc | IgM anti-HBc | HBsAg |
| Wednesday, 10 October 2001 | | | | | | | | | | |
| 8:00 ^b | No | — | — | — | + | | | | | |
| 8:30 | No | — | — | — | — | | | | | |
| 9:30 | Yes | + | — | — | — | | | | | |
| 10:00 | Yes | + | — | — | — | | | | | |
| 10:30 ^c | No | — | + | + | + | | | | | |
| 11:00 | Yes | + | — | — | — | | | | | |
| Thursday, 11 October 2001 | | | | | | | | | | |
| 7:45 | Refused ^d | | | | | | | | | |
| 8:00 | Yes | + | — | — | — | Yes | + | — | — | — |
| 8:30 | No | — | — | — | — | Yes | + | — | — | — |
| 9:00 | Yes | + | — | — | — | Yes | + | — | — | — |
| 9:30 | Yes | + | + | — | — | Yes | + | — | — | — |
| 10:00 | Yes | + | — | — | — | Refused ^d | | | | |
| 10:30 | No | — | — | — | — | No | — | — | — | — |
| 11:00 | No | — | + | — | — | | | | | |
| Friday, 12 October 2001 | | | | | | | | | | |
| 8:00 | | | | | | Yes | + | — | — | — |
| 8:30 | | | | | | Yes | + | — | — | — |
| 9:00 | | | | | | Yes | Equivocal | — | — | — |
| 9:30 | | | | | | Yes | + | — | — | — |
| 10:00 | | | | | | No | — | — | — | — |
| 10:30 | | | | | | No | — | + | — | — |
| 11:00 | | | | | | Yes | + | — | — | — |
| 11:15 | | | | | | No | — | — | — | — |

NOTE. Anti-HBc, total HB anti-core antibody; anti-HBs, HB surface antibody; HBsAg, HB surface antigen; IgM anti-HBc, HB anti-core IgM antibody.

^a Confirmed receipt of 3 doses of HBV vaccine.

^b Source patient.

^c Index patient.

^d Refused evaluation by Department of Health.

Patient-to-Patient Transmission of Hepatitis B Virus Associated with Oral Surgery

John T. Redd Joan Baumbach William Kohn Omana Nainan Marina Khristova Ian Williams

The Journal of Infectious Diseases, Volume 195, Issue 9, 1 May 2007, Pages 1311–1314

Dokumentovano prenošenje infekcije hepatitis C i HIV virusa u stomatološkoj praksi



The hepatitis C viruses isolated from both of these patient specimens were an exact genetic match. Other supportive evidence of patient-to-patient transmission is:

The oral surgical procedures performed on both patients occurred on the same day and the patient known to be chronically infected with HCV preceded the acutely-infected patient;

*Both patients received similar intravenously injected sedation drugs;
and*

There were no common exposures identified for the source patient and the index patient other than both having a dental procedure at the same clinic.

Dentist-to-patient transmission event of HIV in Florida during 1991.

Hepatitis B virus transmissions associated with a portable dental clinic, West Virginia, 2009

Rachel A. Radcliffe, DVM, MPH; Danae Bixler, MD, MPH; Anne Moorman, BSN, MPH; Vicki A. Hogan, MPH; Vickie S. Greenfield, RN, BSN; Diana M. Gaviria, MD; Priti R. Patel, MD, MPH; Melissa K. Schaefer, MD; Amy S. Collins, BS, BSN, MPH; Yury E. Khudyakov, PhD; Jan Drobeniuc, MD, PhD; Barbara F. Gooch, DMD, MPH; Jennifer L. Cleveland, DDS, MPH

ABSTRACT

Background. Although hepatitis B virus (HBV) transmission in dental settings is rare, in 2009 a cluster of acute HBV infections was reported among attendees of a two-day portable dental clinic in West Virginia.

Methods. The authors conducted a retrospective investigation by using treatment records and volunteer logs, interviews of patients and volunteers with acute HBV infection as well as of other clinic volunteers, and molecular sequencing of the virus from those acutely infected.

Results. The clinic was held under the auspices of a charitable organization in a gymnasium staffed by 750 volunteers, including dental care providers who treated 1,137 adults. Five acute HBV infections—involving three patients and two volunteers—were identified by the local and state health departments. Of four viral isolates available for testing, all were genotype D. Three case patients underwent extractions; one received restorations and one a dental prophylaxis. None shared a treatment provider with any of the others. One case volunteer worked in maintenance; the other directed patients from triage to the treatment waiting area. Case patients reported no behavioral risk factors for HBV infection.

The investigation revealed numerous infection control breaches. **Conclusions.** Transmission of HBV to three patients and two volunteers is likely to have occurred at a portable dental clinic. Specific breaches in infection control could not be linked to these HBV transmissions.

Practical Implications. All dental settings should adhere to recommended infection control practices, including oversight; training in prevention of bloodborne pathogens transmission; receipt of HBV vaccination for staff who may come into contact with blood or body fluids; use of appropriate personal protective equipment, sterilization and disinfection procedures; and use of measures, such as high-volume suction, to minimize the spread of blood.

Key Words. Dentistry; hepatitis B virus; outbreak; infection control; portable dental equipment.

JADA 2013;144(10):1110-1118.



Figure. Photograph of a 2008 temporary dental clinic operations area in a West Virginia high school gymnasium, a setup similar to that used in the same gymnasium in the 2009 clinic discussed in this article.

ADMINISTRATIVE MERE

Key ADMINISTRATIVE RECOMMENDATIONS for Dental Settings

1. Develop and maintain infection prevention and occupational health programs.
2. Provide supplies necessary for adherence to Standard Precautions (e.g., hand hygiene products, safer devices to reduce percutaneous injuries, personal protective equipment).
3. Assign at least one individual trained in infection prevention responsibility for coordinating the program.
4. Develop and maintain written infection prevention policies and procedures appropriate for the services provided by the facility and based on evidence-based guidelines, regulations, or standards.
5. Facility has system for early detection and management of potentially infectious persons at initial points of patient encounter.

EDUKACIJA

Key Recommendations for EDUCATION AND TRAINING in Dental Settings

1. Provide job- or task-specific infection prevention education and training to all DHCP.
 - a. This includes those employed by outside agencies and available by contract or on a volunteer basis to the facility.
2. Provide training on principles of both DHCP safety and patient safety.
3. Provide training during orientation and at regular intervals (e.g., annually).
4. Maintain training records according to state and federal requirements.

ZAŠTITA OSOBLJA

Key Recommendations for DENTAL HEALTH CARE PERSONNEL SAFETY

1. Current CDC recommendations for immunizations, evaluation, and follow-up are available. There is a written policy regarding immunizing DHCP, including a list of all required and recommended immunizations for DHCP (e.g., hepatitis B, MMR (measles, mumps, and rubella) varicella (chickenpox), Tdap (tetanus, diphtheria, pertussis).
2. All DHCP are screened for tuberculosis (TB) upon hire regardless of the risk classification of the setting.
3. Referral arrangements are in place to qualified health care professionals (e.g., occupational health program of a hospital, educational institutions, health care facilities that offer personnel health services) to ensure prompt and appropriate provision of preventive services, occupationally-related medical services, and postexposure management with medical follow-up.
4. Facility has well-defined policies concerning contact of personnel with patients when personnel have potentially transmissible conditions.

HIGIJENA RUKU OSOBLJA

Key Recommendations for HAND HYGIENE in Dental Settings

1. Perform hand hygiene—
 - a. When hands are visibly soiled.
 - b. After barehanded touching of instruments, equipment, materials, and other objects likely to be contaminated by blood, saliva, or respiratory secretions.
 - c. Before and after treating each patient.
 - d. Before putting on gloves and again immediately after removing gloves.
2. Use soap and water when hands are visibly soiled (e.g., blood, body fluids); otherwise, an alcohol-based hand rub may be used.

LIČNA ZAŠTITA

Key Recommendations for PERSONAL PROTECTIVE EQUIPMENT (PPE) in Dental Settings

1. Provide sufficient and appropriate PPE and ensure it is accessible to DHCP.
2. Educate all DHCP on proper selection and use of PPE.
3. Wear gloves whenever there is potential for contact with blood, body fluids, mucous membranes, non-intact skin or contaminated equipment.
 - a. Do not wear the same pair of gloves for the care of more than one patient.
 - b. Do not wash gloves. Gloves cannot be reused.
 - c. Perform hand hygiene immediately after removing gloves.
4. Wear protective clothing that covers skin and personal clothing during procedures or activities where contact with blood, saliva, or OPIM is anticipated.
5. Wear mouth, nose, and eye protection during procedures that are likely to generate splashes or spattering of blood or other body fluids.
6. Remove PPE before leaving the work area.

BEZBEDNO RUKOVANJE SA INSTRUMENTIMA

Key Recommendations for SHARPS SAFETY in Dental Settings

1. Consider sharp items (e.g., needles, scalers, burs, lab knives, and wires) that are contaminated with patient blood and saliva as potentially infective and establish engineering controls and work practices to prevent injuries.
2. Do not recap used needles by using both hands or any other technique that involves directing the point of a needle toward any part of the body.
3. Use either a one-handed scoop technique or a mechanical device designed for holding the needle cap when recapping needles (e.g., between multiple injections and before removing from a non-disposable aspirating syringe).
4. Place used disposable syringes and needles, scalpel blades, and other sharp items in appropriate puncture-resistant containers located as close as possible to the area where the items are used.

BEZBEDNA PRIMENA MEDIKAMENATA

Key Recommendations for SAFE INJECTION PRACTICES in Dental Settings

1. Prepare injections using aseptic technique² in a clean area.
2. Disinfect the rubber septum on a medication vial with alcohol before piercing.
3. Do not use needles or syringes* for more than one patient (this includes manufactured prefilled syringes and other devices such as insulin pens).
4. Medication containers (single and multidose vials, ampules, and bags) are entered with a new needle and new syringe, even when obtaining additional doses for the same patient.
5. Use single-dose vials for parenteral medications when possible.
6. Do not use single-dose (single-use) medication vials, ampules, and bags or bottles of intravenous solution for more than one patient.
7. Do not combine the leftover contents of single-use vials for later use.
8. The following apply if multidose vials are used—
 - a. Dedicate multidose vials to a single patient whenever possible.
 - b. If multidose vials will be used for more than one patient, they should be restricted to a centralized medication area and should not enter the immediate patient treatment area (e.g., dental operator) to prevent inadvertent contamination.
 - c. If a multidose vial enters the immediate patient treatment area, it should be dedicated for single-patient use and discarded immediately after use.
 - d. Date multidose vials when first opened and discard within 28 days, unless the manufacturer specifies a shorter or longer date for that opened vial.
9. Do not use fluid infusion or administration sets (e.g., IV bags, tubings, connections) for more than one patient.

STERILIZACIJA I DEZINFEKCIJA

Key Recommendations for STERILIZATION AND DISINFECTION OF PATIENT-CARE DEVICES for Dental Settings

1. Clean and reprocess (disinfect or sterilize) reusable dental equipment appropriately before use on another patient.
2. Clean and reprocess reusable dental equipment according to manufacturer instructions. If the manufacturer does not provide such instructions, the device may not be suitable for multi-patient use.
 - a. Have manufacturer instructions for reprocessing reusable dental instruments/equipment readily available, ideally in or near the reprocessing area.
3. Assign responsibilities for reprocessing of dental equipment to DHCP with appropriate training.
4. Wear appropriate PPE when handling and reprocessing contaminated patient equipment.
5. Use mechanical, chemical, and biological monitors according to manufacturer instructions to ensure the effectiveness of the sterilization process. Maintain sterilization records in accordance with state and local regulations.

Instrumenti i oprema u stomatologiji koja je predviđena za jednokratnu upotrebu

SINGLE USE

I koja je tako deklarirana od strane proizvođača

Ne može biti reprocessovana i ponovo korišćena

**Summary of
Infection Prevention
Practices in
Dental Settings**

blood or body fluids. Manufacturer's instructions for reprocessing reusable dental instruments and equipment should be readily available—ideally in or near the reprocessing area. Most single-use devices are labeled by the manufacturer for only a single use and do not have reprocessing instructions. Use single-use devices for one patient only and dispose of appropriately.

*Basic Expectations
for Safe Care*

Centers for Disease Control and Prevention. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA: Centers for Disease Control and Prevention, US Dept of Health and Human Services; October 2016.

Figure 30. International symbol for single-use medical devices



DO NOT REUSE.
Synonyms for this are
Single-use or Use only
once.

REUSEABLE DEVICE

Reprocesovanje instrumenata –
hirurški instrumenti koji se nakon
upotrebe prema uputstvu proizvođača
mogu reprocessovati i bezbedno koristiti

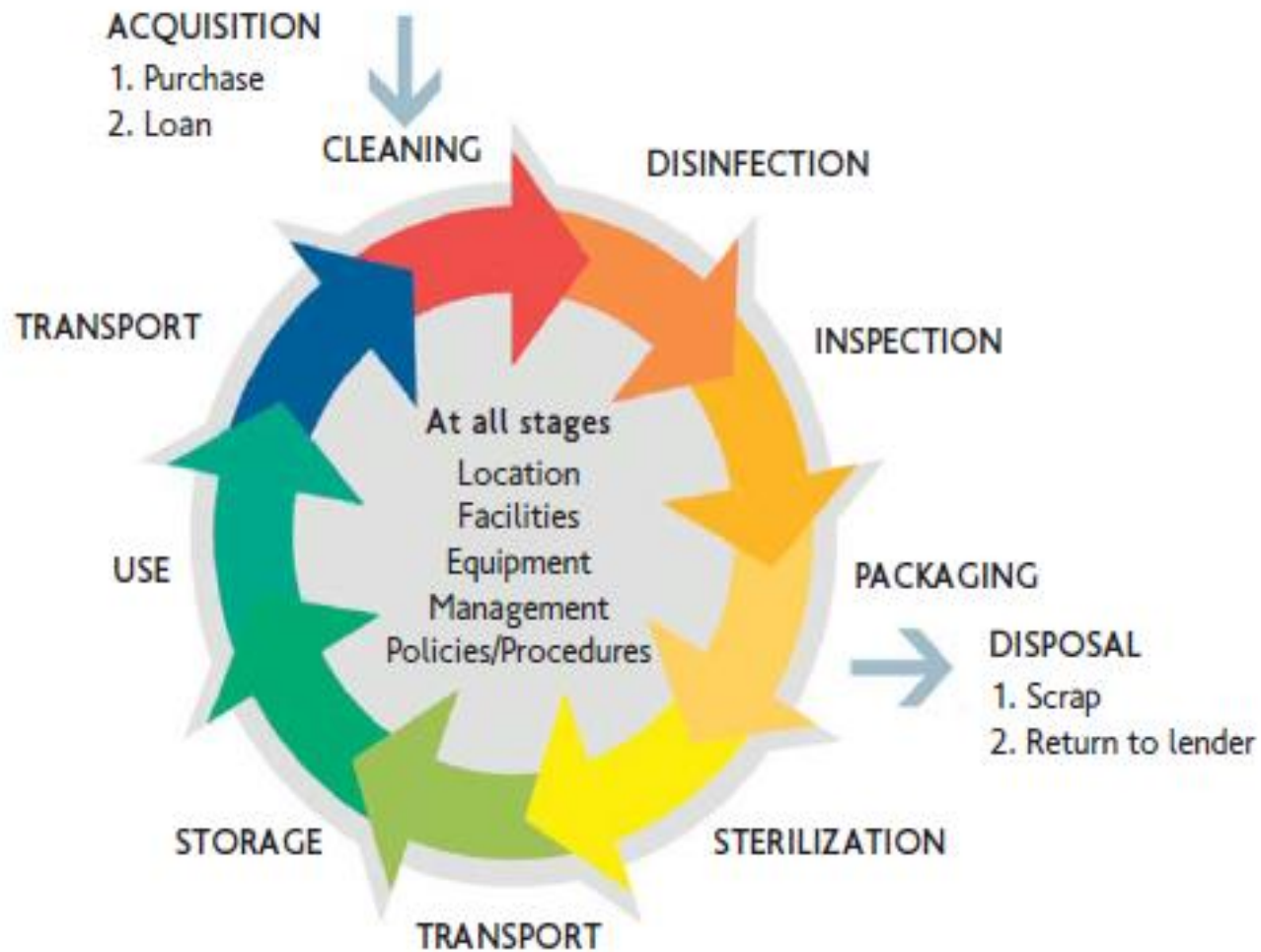
SINGLE USE DEVICE

Koristiti samo za jednog pacjenta

A **reusable device**, such as a surgical instrument, is designed to be used many times on different patients, and the manufacturer provides detailed instructions on how it can be safely reprocessed between each patient.

A **single-use device** is designed by a manufacturer to be used on a single patient only and then discarded. Emphasis is on a “single patient” and a device may be used multiple times on the same patient, depending on its design and manufacturers’ instructions.

Figure 1. The decontamination life cycle



Cleaning circle: all factors are essential¹⁸



18 Sinner's Circle (Dr Herbert Sinner, 1959)

Klasifikacija kategorija rizika prema Spaldingu, po predmetima, procedurama i primerima instrumenata koji se koriste u stomatologiji

- **Critical items (Kritični instrumenti i oprema)** pripadaju svi instrumenti i medicinska oprema koja dolazi u kontakt sa primarno sterilnim tkivima i vaskularnim sistemom.
- **Semicritical items (polukritični instrumenti i oprema)** pripadaju svi instrumenti i medicinska oprema koja dolazi u kontakt sa intaktnom mukozom i kožom i koja ne dolazi u kontakt sa sterilnim tkivima i vaskularnim sistemom.
- **Noncritical items (nektitični instrumenti i oprema)** pripadaju svi instrumenti i medicinska oprema koja dolazi u kontakt sa intaktnom kožom ali ne i sa mukozom.



Klasifikacija kategorija rizika prema Spaldingu, po predmetima, procedurama i primerima instrumenata koji se koriste u stomatologiji

Kategorije rizika

Kritičani predmet



| Procedure | Primeri instrumenata | Napomene |
|---|---|---|
| Oralno-hirurški zahvati, poput vađenja potpuno impaktiranih zuba, ekstrakcija i endodontske procedure vitalnog tkiva zubne pulpe | <ul style="list-style-type: none">• igle i špricevi• Stomatološka klešta i poluge• Pokretni retraktori i hirurški boreri• Instrumenti za ugradnju implantata, implantabilne opreme, uključujući mini-implante i hirurške nasadnike | <ul style="list-style-type: none">• Moraju biti sterilni u trenutku upotrebe i moraju ili biti jednokratni (potrošni) ili podložni sterilizaciji parom• Kritični predmeti se moraju koristiti odmah nakon sterilizacije ili se čuvati u kesama do upotrebe.• Ako se kese oštete, instrumenti se moraju ponovo sterilisati pre upotrebe |

Klasifikacija kategorija rizika prema Spaldingu, po predmetima, procedurama i primerima instrumenata koji se koriste u stomatologiji

| Kategorije rizika | Procedure | Primeri instrumenata | Napomene |
|-------------------|-----------|----------------------|----------|
|-------------------|-----------|----------------------|----------|

Semi-kritičan predmet
Kontakt sa intaktnom nesterilnom sluzokožom ili ne-intaktnom kožom

Opšti oralni zahvati

Stomatološka ogledala
Restorativni instrumenti
Stomatološke pincete i sonde
Metalne kašike za uzimanje otisaka
Drugi nekritični predmeti koji se povremeno koriste u ustima, npr. Lekron nož

Instrumenti se sterilizuju između korišćenja na različitim pacijentima ili su jednokratni (potrošni). Nakon procesiranja, instrumente bi trebalo pakovati u kese i čuvati u zatvorenim fiokama ili tome namenjenim posudama, poput kasete za instrumente, dok ne budu potrebni. U retkim slučajevima, termička dezinfekcija, npr. termička dezinfekcija diskova za poliranje proteza, može biti podesna zato što je verovatnoća kontaminacije ovih instrumenata krvlju mala.



Klasifikacija kategorija rizika prema Spaldingu, po predmetima, procedurama i primerima instrumenata koji se koriste u stomatologiji

| Kategorije rizika | Procedure | Primeri instrumenata | Napomene |
|-------------------|-----------|----------------------|----------|
|-------------------|-----------|----------------------|----------|

Nekritičan predmet
Kada postoji dodir sa
intaktnom kožom

Protetski merači i
oprema za merenje
Zaštitne naočari
Štipaljke na lancu
Dapenglas bočice
Šubleri
Maske za lice

Čišćenje deterdžentom i
vodom uglavnom je
dovoljno, ali u nekim
slučajevima se preporučuje
termička dezinfekcija
toplotom i vodom
Nakon procesiranja, ove
instrumente bi trebalo
čuvati na isti način kao i
semi-kritične instrumente
kako bi se sprečila
kontaminacija pre
upotrebe



Pranje instrumenata

- ✓ Uklanjanje vidljivih organskog i nenorganskog ručno ili mehanički pomoću vode s deterdžentima ili enzimskim proizvodima.
- ✓ neophodno pre disinfekcije i sterilizacije zbog prisustva anorganskih i organskih materijala koji ostaju na površini instrumenata ometaju efikasnost tih procesa

International Association of Healthcare Central Service Materiel Management (IAHCSMM) Central Service Technical Manual 7th ed. (2007). (<https://www.iahcsmm.org/publications/central-service-technical-training.html>, Accessed 20 August 2015)

Pranje instrumenata

Pranje instrumenata je prvi i najvažniji korak prije bilo kakvog procesa dezinfekcije ili sterilizacije

1. Čišćenje je prvi korak u reprocessovanju nakon upotrebe
2. Nepravilno čišćenje instrumenta dovodi do prisustvo organskih materija na instrumentima čime se onemogućava proces dezinfekcije i sterilizacije
3. Čišćenje se vrši :
 - Ručno
 - Mašinsko

Pranje instrumenata

Mašinsko pranje

- Koristite mehaničke uređaje za pranje u skladu sa uputstvima proizvođača
- Ručno čistite izrazito uprljana sredstva pre mehaničkog čišćenja, ako je to potrebno
- **Ultrazvučne mašine** za pranje se preporučuju za sva semi-kritična i kritična medicinska sredstva koja imaju zglobove, proreze, lumene ili bilo kakve delove koje je teško očistiti
- **Mašine za pranje i dezinfekciju** se preporučuju za medicinska sredstva koja mogu da podnesu mehaničko čišćenje kako bi se postigla izloženost potrebna za čišćenje i kako bi se smanjila potencijalna opasnost po zdravlje osoblja

Pranje instrumenata

Mašinsko pranje

Ultrazvučni uređaji za čišćenje

Ultrazvučni uređaji za čišćenje predstavljaju metod mehaničkog čišćenja koji je efikasan za teško pristupačne delove hirurških instrumenata.

Ultrazvučne vibracije prolaze kroz rastvor za čišćenje i stvaraju mehuriće. Kako se mehurići povećavaju, oni postaju nestabilni i implodiraju, što čini proces koji se zove *kavitacija*.

Time se stvara vakuum u rastvoru koji izvlači nečistoće sa instrumenata u okolnu tečnost.

Pranje instrumenata

Mašinsko pranje

Ultrazvučni uređaji za čišćenje

- Instrumenti se moraju očistiti od težih nečistoća pre korišćenja ultrazvučnog čistača
- Temperatura vode bi trebalo da bude između 27° C (80F) i 43° C (109F), a nikad iznad 60° C (140F) zato što se proteini zgrušavaju iznad te temperature
- Trebalo bi da se poštuju preporuke proizvođača za doziranje i temperaturu rastvora za čišćenje
- Vodu bi trebalo menjati svakodnevno i svaki put kada je vidno prljava
- Instrumente bi trebalo otvoriti i potpuno potopiti, a lumene napuniti do kraja
- Konsultujte preporuke proizvođača instrumenta za konkretne informacije o čišćenju pre nego što sredstva stavite u ultrazvučni uređaj za čišćenje
- Nakon čišćenja u ultrazvučnom uređaju, instrumenti se moraju isprati i osušiti

Pranje instrumenata

Automatizovani uređaji za pranje

Uređaji za pranje i dezinfekciju rade na principu korišćenja vode pod pritiskom kako bi se fizički uklonili mikroorganizmi.

Automatizovani uređaji za pranje predstavljaju veoma efikasan metod za čišćenje i dezinfekciju instrumenata zahvaljujući deterdžentima i termičkoj radnji koji se koriste. Ciklus se sastoji iz nekoliko koraka, uključujući i pretpranje, enzimsko pranje, pranje deterdžentom i podmazivanje.

Finalno ispiranje na temperaturi koja termički dezinfikuje pomoću dejonizovane vode pomaže pri sprečavanju taloženja minerala i stvaranja fleka, kao i pri sušenju

MOŽETE OPRATI BEZ STERILIZAIJE ALI NE MOŽETE STERILSATI BEZ PRANJA



One can clean without sterilizing, but one cannot sterilize without cleaning!

International Association of Healthcare Central Service Materiel Management (IAHCSMM) Central Service Technical Manual 7th ed. (2007). (<https://www.iahcsmm.org/publications/central-service-technical-training.html>, Accessed 20 August 2015)

PAKOVANJE

✓ Ambalaža koja se koristi za instrumente i kasete pre sterilizacije uključuje:

foliju/platnene/plastične/kombinovane

- ✓ Pakovanje pre sterilizacije posebno je dizajnirano kako bi se omogućilo prodiranje toplote/pare pod pritiskom
- ✓ Nakon sterilizacije, instrumenti moraju ostati u pakovanjima do upotrebe.
- ✓ Različiti materijali pogodni su za različite vrste sterilizatora.

Sva ambalaža je samo za jednu upotrebu.

Korištenje trake za ponovno zatvaranje prethodno korišćenog materijala za pakovanje može ne garantuje funkcionalnost i bezbednost sterilizacije

Association for the Advancement of Medical Instrumentation, American National Standards Institute. Good hospital practice: steam sterilization and sterility assurance. ANSI/AAMI ST46-1993. Arlington, VA: Association for the Advancement of Medical Instrumentation, 1993.

Rutala WA, Weber DJ. Choosing a sterilization wrap for surgical packs. Infect Cont Today. 2000;4:64-70.

PAKOVANJE

- ✓ Pakovanje instrumenata pre procesa sterilizacije.
- ✓ Ambalažni materijal i tehnike osmišljeni su tako da se proces sterilizacija sprovodi neometano i istovremeno omogućava
- ✓ održavanje sterilnosti instrumenata
- ✓ Odabrani materijal za pakovanje zavisi od preporučene metode sterilizacije i moraju biti u skladu s međunarodnim standardima

PACKAGING AND WRAPPING MATERIAL

Devices require packaging prior to sterilization. Packaging material and techniques are designed to hold and protect the devices in order to facilitate sterilization and to maintain sterility and permit aseptic removal of contents at the point of use. The material selected depends on the recommended method of sterilisation and must comply with international standards

EN 868-2:1999; EN 868-3:1999 Packaging materials and systems for medical devices which are to be sterilized. Paper or use in the manufacture of paper bags (specified in EN 868-4) and in the manufacture of pouches and reels (specified in EN 868-5). Requirements and test methods. EN 868-4:1999 Packaging materials and systems for medical devices which are to be sterilized. Paper bags. Requirements and test methods.

EN 868-5:1999 Packaging materials and systems for medical devices which are to be sterilized. Heat and self-sealable pouches and reels of paper and plastic film construction. Requirements and test methods. **21** Materials used should comply with EN ISO 11607-1: 2006 Packaging for terminally sterilized medical devices Part 1. Requirements for materials, sterile barrier systems and packaging systems. ISO 11607-2 (2006) and EN 868, parts 2-10. ISO 16775 inclusive.

STERILIZACIJA

- **Toplota pod pritiskom** (autoklavi) preporučljiv metod sterilizacije za instrumente u stomatologiji
- **Suva toplota i hemijski dezinficijensi nisu preporuka** u rutinskoj stomatološkoj praksi

STERILIZATION OF INSTRUMENTS

Heat (using steam under pressure) is the preferred method for sterilization for all dental instruments. Ideally, this can be done by sending items to a SSD. Alternatively, a rapid turnover of patients will require rapid reprocessing in which case a portable tabletop steam sterilizer/autoclave is acceptable (see Table 18).

Dry heat sterilization and chemicals are **not** recommended for the routine sterilization of dental instruments and equipment. Ultraviolet light and boiling water do not sterilize instruments and must **not** be used.



Processing of instruments in dental practice

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

Basic Expectations for Safe Care

Centers for Disease Control and Prevention. Summary of Infection Prevention Practices in Dental Settings: Basic Expectations for Safe Care. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Oral Health; March 2016.

Adapted from: Guide to Infection Prevention for Outpatient Settings: Minimum Expectations for Safe Care
<http://www.cdc.gov/hai/settings/outpatient/outpatient-care-guidelines.htm>



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