



COVID-19

Practical rules of INFECTION CONTROL for the Dentistry students of UD

1th of July, 2022



DRESS CODE

Proper clothing in the dental office

It is forbidden to enter the dental office wearing outdoor shoes and clothes!

The doctor/nurse who works in the clinic is required to wear clean, ironed, special medical clothing and closed medical shoes, slippers or clogs. The footwear must be easy to clean and disinfect!

Hair/facial hair

The hair (also beard and moustache) has to be clean and well maintained. Beard and moustache should be neatly trimmed. Long hair should be tied back so it does not block the field of vision and does not interfere with the treatment.

Nails

Nails must be short (no longer than fingertip) and clean. Wearing artificial nails or nail polish is forbidden!

Jewelry

It is forbidden to wear large bracelets, necklaces, long earrings, or more than one ring! Wearing a watch is not recommended during dental treatment.



Proper behaviour in the dental office

- It is forbidden to touch drawers with contaminated gloves (with blood or saliva)!
- Do not eat or drink in the office and do not use cosmetic products!
- Usage of your cell phone, tablet or other personal electronic device is forbidden!
- Close the door behind you after you enter the office!
- Do not sit on the desk or table!



Infection control

Infection control: infection prevention and control (IPC) is a scientific approach and practical solution designed to prevent harm caused by avoidable infection to patients and health workers. It is a subset of epidemiology, but also serves an essential function in infectious diseases, social sciences and global health.

Infection control protocol: Description of the special rules and methods are used and followed to prevent medical care-related contaminations (isolation, usage of protective agents, aseptic techniques, disinfection/sterilisation, education).



Basic terms of infection controll

- **Asepsis:** The set of work methods and work processes used during patient care, which can be used to keep microorganisms away from the patient's body by using sterile tools, materials, and instruments, by creating a microbe-poor environment.
- **Aseptic health care :** all tools and materials used for prophylactic, diagnostic, and therapeutic purposes in curative-preventive care must be sterile, which come into contact with open body tissues, mucous membranes, body openings, and body cavities of the human body.
- **Antisepsis:** the use of chemical substances that result in the destruction of microorganisms in the living organism, body cavities, outer covering, or wounds, a significant reduction in their number, and their inactivation. Its tool is disinfection.
- **PPE: personal protective equipment**



Infections in dentistry

- All patients should be considered as potentially infected/infectious.
- Infections are most commonly spread by contact:
 - directly by not properly disinfected hands, indirectly by not properly sterilized instruments, or airborne.
- The following factors and agents can take part in the formation of cross infections in the dental office: contaminated hands, instruments, surfaces, dental treatment unit, aerosol formation and splash.

The dental treatment is among the so called EPP (exposure prone procedures) so the infection risk is high.



Short summary of the standard protective measures during dental treatment:

- **Regular hand hygiene before and after using gloves**
- **Usage of proper PPE during patient treatment, during cleaning and handling the instruments as well (gloves, mask, glasses, coat).**
- **The sharp disposable instruments have to be collected into a special storing container with rigid wall!**
- **Correct handling of the reusable instruments (disinfection, sterilisation)**
- **Follow cough etiquette, breathing hygiene**
- **Usage of aseptic techniques in certain cases**
- **Correct handling of hazardous waste**
- **Correct handling of contaminated textiles**
- **Application of correct physical barriers (i.e. plastic coverage) if the surface is not easy to clean and/or disinfect**



Hygienic zones, dental surgery design:

- **Treating zone** (1-1,5 m square around the patient's head, here you can only find the instruments that the treatment needs)
- **Around the treating zone** (other materials not needed directly during the treatment e.g.: sink, X-ray, computer)
- **Other territory of the surgery** (where you do the administration, disinfection, sterilization)

Depending on the risk of the contamination the hygienic rules are not the same in the three zones. The risk of the spreading of germs is the highest in the treating zone .



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Basic hygienic rules for the medical staff

Hand wash:

Handwash with a disinfecting washlotion and water is necessary only before surgeries (surgical handwash) or in case of visible contamination, because the very frequent handwash can make the skin dry and it can lead to the formation of micro injuries or fissures; these can be excellent entry gate for the germs.

Hand disinfection:

- Has to be performed before and after wearing gloves, and before leaving the workplace.
- Before hand disinfection every accessory has to be removed from fingers and hands (watch, ring).





Basic hygienic rules for the medical staff

Usage of PPE

- Dental personnel should wear closed coat, hat, mask, glasses and gloves, shoe protectors.
- Using gloves can't replace the regular and thorough handcleaning, hand disinfection!!
- The medical staff must not touch their own eyes, lips, nose or hair during the treatment!
- Touching the drawer with contaminated gloves (by blood or saliva) is forbidden!





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Basic hygienic rules for the medical staff

Put the tools onto the tray after they are taken out from their package. It is forbidden with the packaging still on!





Basic hygienic rules for the medical staff

At the end of the treatment:

- Cleaning and packing away the used tray → drop the injection and suturing needles and blades into the special storing container!
- Drop every single-use device and possible source of infection (used gloves, sterile/used gauze, tooth, granuloma, etc.) into the hazardous waste!





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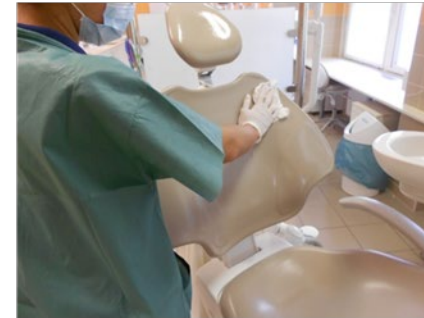
Basic hygienic rules for the medical staff

At the end of the treatment:

- **Cleaning all parts of the dental chair:** Cleanisept wipes
- **Disinfection of instruments :**
 - wash in cold water
 - bath in solution of Sekusept active
 - wash down in warm running water
 - sterilization
- **Disinfection of handpieces, chip blower and other surfaces:**
Mikrozid wipes
- **Disinfection of impression materials:**
 - wash in running water, bath in Descoprent solution .

Pay attention to the necessary waiting time while the solutions take their effect!!

Proper ventilation is important!!





Dental Treatment in case of a known carrier

- The patient must be treated as the last, if possible in a separate room
- Make only extraoral X-ray (avoid intraoral ones)
- Wear properly fitted respirators (FFP)
- Wear other proper PPE like: coat, gloves (disposable), glasses/shield
- Avoid using turbine, air water syringe, depurator. If unavoidable, use exhaustor!
- Disposable plastic cups, suction, apron
- The patient shouldn't use the spitting bowl, use a disposable paper cup instead
- All of the above mentioned has to be handled as hazardous waste
- Contaminated equipment should be collected separately
- Right after the treatment a disinfection cleaning has to be made



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COVID-19 specific infection control




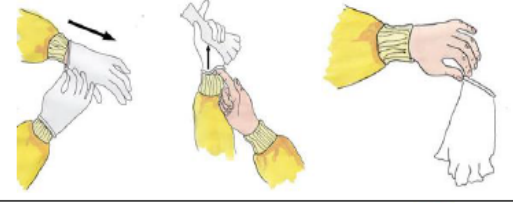

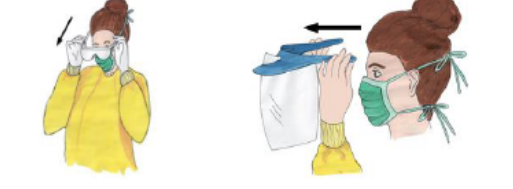


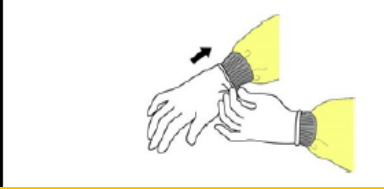
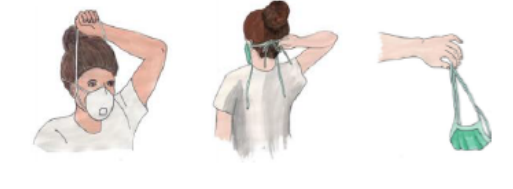
Relevant instructions, procedures, methods

- EMMI Recommendation of the Department of Dental and Oral Diseases of the Professional College of Health on the resumption of dental patient care – 04.05.2020
- Methodological Letter of the Department of Dental and Oral Diseases of the National Center for Epidemiology and the Professional College of Health Care– Prevent infections associated with dental health care -2016
- Edict of the Hungarian Government about the predictable dental care, rehabilitation care and predictable invasive interventions in emergency phase 469/2021. (VIII.6)
- Instructions of the head of DE and rector of KK (RH/7-87/2021, RH/7-90/2021)
- DE KK Case examinations and instructions of the hospital hygiene department



The use of protective equipment

- **For the care of non-suspicious patients**
 - **Patient care:**
 - Work clothes, surgical mask covering the nose and the mouth as well, gloves, **shield**, **hair protection net**, **closed shoes**
 - **Non-aerosol interventions:**
 - Work clothes, surgical mask covering the nose and the mouth as well, gloves, **shield**, **hair protection net**, **closed shoes**
 - **Aerosol formation interventions:**
 - **FFP2 mask**
 - **Shield**
 - **Disposable gown/plastic gown**
 - **Hair protection net**
 - **Gloves**

Take on the personal protective equipment		Take off the personal protective equipment	
1. Gown		1. Gloves	
2. Mask Aerosol formation interventions. After you take on the mask, the fit test is mandatory. The well-fitting mask retracts when inhaled. There is no airflow around it when you exhale.		2. Glasses/Shield	
3. Glasses/Face protecting shield		3. Gown	
4. Gloves		4. Mask	
Follow the infection control rules Don't touch your face Avoid touching surfaces Change the contaminated or damaged gloves Disinfect your hands before taking on the gown and gloves		Follow the infection control rules When you take off the personal protective equipments don't touch the contaminated surfaces Take the used protective equipments to the designated waste collector	

Forrás: CDC Szakmai adaptálás: OEK Grafikai adaptálás: Jankech Bernadett

Personal protective equipments-Sizes

1. Take off the contaminated gloves-hand disinfection-new gloves



Disinfection

(usage of disinfection agents with antiviral effect)

Information and coordination point at the entrance, X-ray, Practice rooms

Surfaces, rotating equipments, thermometers, pens: Mikrozyd Sensitive Wipes wipe

Instrument, equipment: Sekusept Aktiv 2% solution (30 minute)

Chair: Cleanisept solution. Waiting time between two applications:

- in case of with aerosol formation: 15 minutes is required
- in case of without aerosol formation: 5 minutes is required

Saliva suction system: Decaseptol gel

Safety glasses, face protector: Cleanisept 2% solution (30 minute)



Hand hygiene

- **Regular hand disinfection** („five moments” principle)!
 1. before touching the patients
 2. before aseptic interventions
 3. after the exposure with exsudates
 4. after touching the patients
 5. after touching the patient’s environment
- **The use of gloves is not a substitute for hand disinfection**
- **BEFORE and AFTER the use of the gloves is compulsory to disinfect your hands!**
- **You have to change the contaminated or damaged gloves!**
- **IMPORTANT! The most effective way to prevent the spread of the new coronavirus is to disinfect your hands frequently!**

Alcohol hand rubbing process

1st step: Apply 5 ml of hygienic hand sanitizer to your dry hands



2nd step: with the fingertips of the other hand, rub some of the liquid into the palm of your hand then repeat the movement by dripping the residue into your other palm



3rd step: rub your palms together and the inner surface of your fingers



4th step: clasp your hands together and rub the inner surface of your fingers together



5th step: connect your right and left hands then rub together



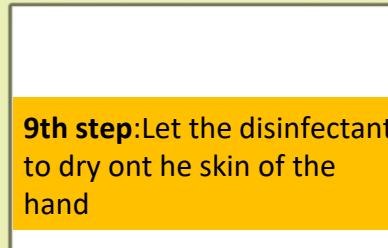
6th step: rub the surface of the back of the hand with both hands



7th step: rub your left thumb into your right palm then repeat it with the other hand



8th step: rub through the surface of both wrists



9th step: Let the disinfectant to dry on the skin of the hand

Rule of hand hygiene:

- The nails should be short, not exceeding the length of the fingertips and have rounded ends.
- It is **FORBIDDEN** to wear painted nails, artificial nails, watches, bracelets, rings!



Some principles of safe working

- Body temperature measurement is mandatory before starting work. (Faculty of Dentistry entrance)
- Any students who experiences **acute respiratory symptoms, or fever and/or acute gastrointestinal infection** should not be allowed to work and **must remain at home**. The student is **required to notify** the UD Faculty of Dentistry Education Secretariat, whose staff will inform her/him of any further action required.
- Every student has to be COVID vaccinated! (Instructions of the head of DE and rector of KK)
- **Students can treat only patients who have valid Covid vaccination card!**
- It is essential that in the building of the Department **everyone in all places** wear a surgical mask covering their mouth and nose at **all times**.



Some principles of safe working

- **Keep your hands away from your face and the personal protective equipment you are wearing.**
- **Touch the surfaces in the patient's environment as little as possible**
- **When treating a patient, only the necessary devices and equipments may be on the desktop.**
- **Recommended before taking on the personal protective equipment:**
 - **Check that the personal protective equipment is available in the right size for the employee**
 - **Adequate hydration**
 - **Long hair should be tied back**
 - **Jewelry must be removed!**

Some principles of safe working

- It is recommended to **take a shower and wash your hair after work.**
- **Frequent ventilation** is important.
- All materials used during treatment and in contact with the patient's body fluids and the worn disposable **personal protective equipment** must be disposed of as **hazardous waste!**
- **It is forbidden to eat, drink or use a mobile phone in the practice rooms!**

Some principles of safe working

- **Wearing work clothes is mandatory!**
 - **It is forbidden to use your own work clothes!**
 - **Take over the work clothes first time**
 - First day of the practice
 - Signature (1 white coat, 1 pair of scrubs (shirt and trousers, 1 locker key)

Some principles of safe working

- Rules for wearing work clothes, changing work clothes
 - At phantom practices
 - Take on white coat to your own clothes, change coats once a week
 - Patient care practices
 - **Forbidden to wear your own clothes!**
 - **The work clothes are surgical shirt and surgical trousers worn at the beginning of the practice**
 - **Daily change of working clothes is mandatory!**
 - Collection of laundry every day, put it in a nylon bag at the end of the practice, naming it, putting it in the locker designated for collecting laundry in the locker room.
 - Change of clothes before every practice from 7.30-8.00 and 12:00-12:30 with itemized handover in Clean clothes Stock-”Tisztaruha Raktár” (Old building part, basement)
 - When leaving the practice room, it is mandatory to wear a white coat!

Some principles of safe working

- **Return the working clothes**
 - After fulfilling the requirements of the summer practice, the received clothes and locker key must be returned to the Clean Clothes Stock with a signed statement
 - The signed statement must be submitted to the Education Secretariat.



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