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Version	01

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HAND HYGIENE GUIDE

1. PURPOSE

The purpose of this guide is to establish uniform requirements for performing hand hygiene and the relevant techniques for the employees of the Hospital to reduce the number of hazardous microorganisms on the hands and this way to provide patients with the safest possible treatment.

2. **RESPONSIBILITY**

The guide applies to health care personnel in all structural units of the Hospital. The heads of structural units are responsible for the implementation of the guide. The control of compliance with this guide is performed by the Infection Control Service.

3. DEFINITIONS

- 3.1. Hand hygiene includes hand washing, hand antiseptics, nail and hand skin care.
- **3.2. Hand washing** is washing your hands with soap, which is applied to the skin previously moistened under running water.
- **3.3. Surgical hand washing** is the washing of hands, wrists, and forearms with soap, which is applied to skin previously moistened under running water.
- **3.4. Hand antiseptic** is an alcoholic substance used to reduce the number of microorganisms on your hands.
- **3.5.** Antiseptic treatment of hands is a hand treatment with an antiseptic that is applied to dry hands.
- **3.6. Surgical antiseptic treatment of hands** is a treatment of hands, wrists, and forearms with an antiseptic that is applied to dry hands.
- **3.7. Health care personnel** the employees who, in the course of providing health care, are involved in the treatment process, are in contact with the patient and the patient's immediate surroundings and with medicines and biological materials (physician, dentist, midwife, nursing and care worker, laboratory technician, physiotherapist, radiology technician, dispensing chemist, pharmacist or other health care specialist working in the Hospital)

4. DESCRIPTION OF ACTIVITIES

4.1. Methods of hand hygiene

Hand hygiene methods include hand washing, surgical hand washing, antiseptic treatment of hands and surgical antiseptic treatment of hands.



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4.2. General requirements

- 4.2.1. The antiseptic dispensers are placed at the door of each ward, next to the bed, on the bed, or in other necessary locations.
- 4.2.2. Wearing rings, wristbands, watches, and bracelets is not allowed.
- 4.2.3. An employee with damaged hands (injuries, dermatitis, panaris, etc.) is, if possible, released from work duties that require antiseptics treatment of hands.
- 4.2.4. Nails must be healthy, clean and well tended. The length of the free part of the nail must not exceed the fingertip.
- 4.2.5. Polished nails, artificial nails, permanent gel polish, and nail enhancements are not allowed.

4.3. Performing hand hygiene

4.3.1. Hand washing

- 4.3.1.1. In case of visible contamination of hands.
- 4.3.1.2. Before eating.
- 4.3.1.3. After sniffing, sneezing and coughing.
- 4.3.1.4. After using the toilet.

4.3.2. Hand washing and subsequent antiseptic treatment of hands

- 4.3.2.1. After hand contact with a patient infected or colonized by the sporeforming bacteria (*Clostridium difficile*, JKL-155).
- 4.3.2.2. After hand contact with a patient who has or is suspected of having viral gastroenteritis.

4.3.3. Antiseptic treatment of hands

Antiseptic treatment of hands is carried out in the following situations, regardless of whether the gloves were worn or not:

- 4.3.3.1. Before and after hand contact with the patient.
- 4.3.3.2. After contact with the patient's blood and other bodily fluids.
- 4.3.3.3. Before and after hand contact with wounds and mucous membranes.
- 4.3.3.4. After touching a contaminated area before touching other body areas of the same patient.
- 4.3.3.5. Before and after using gloves.
- 4.3.3.6. Before and after invasive procedures.
- 4.3.3.7. After hand contact with surfaces and objects in the patient's nearest surroundings (e.g. apparatus and equipment).
- 4.3.3.8. Before preparation and administration of medications.
- 4.3.3.9. If the operation time exceeds 3 hours, there will be the antiseptic treatment of hands and gloves get exchanged.
- 4.3.3.10. When the glove ruptures during surgery or surgical procedure, gloves are removed, antiseptic treatment of hands is carried out and new gloves are used.
- 4.3.3.11. At the end of surgery or surgical procedure.

4.3.4. Surgical hand washing

4.3.4.1. Before the first surgery or surgical procedure of the day.

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- 4.3.4.2. In the case of successive operations or surgical procedures, if you have left the operating room.
- 4.3.4.3. In case of visible contamination of hands.
- 4.3.4.4. Surgical hand washing is always followed by surgical antiseptic treatment of hands.

4.3.5. Surgical antiseptic treatment of hands

4.3.5.1. Immediately before any surgery or surgical procedure (angiography, etc.) that requires sterile clothing.

4.3.5.2. In the case of successive operations or surgical procedures, surgical antiseptic treatment of hands is performed only when you have not left the operating room.

4.4. The technique of hand washing and antiseptic treatment of hands

4.4.1. Hand washing technique

- 4.4.1.1. Stand away from the sink so that the clothes do not come into contact with the sink.
- 4.4.1.2. Hands and wrists are moistened with warm running water.
- 4.4.1.3. 3-5 ml of soap is applied to hands and wrists.
- 4.4.1.4. Wash hands and wrists by rubbing intensively the soap-coated surfaces for at least 30 seconds. Special attention is paid to the subungual areas, fingertips, thumbs, and spaces between fingers.
- 4.4.1.5. Rinse hands and wrists thoroughly with plenty of running water.
- 4.4.1.6. Close the tap using the elbow. In the absence of such an option, the tap is closed with a paper towel to prevent contamination of the hands.
- 4.4.1.7. Hands and wrists are dried with disposable paper towels.
- 4.4.1.8. The used paper towel is thrown into a dedicated waste container.

4.4.2. The technique of antiseptic treatment of hands

- 4.4.2.1. 3 ml of antiseptic is applied to dry hands.
- 4.4.2.2. The hands are rubbed until they dry (at least 30 seconds). When performing antiseptic treatment of hands, special attention is paid to fingertips, thumbs, and spaces between fingers.
- 4.4.2.3. Before putting on gloves, check that the hands are dry.

4.4.3. Surgical hand washing technique

- 4.4.3.1. Stand away from the sink so that the clothes do not come into contact with the sink.
- 4.4.3.2. Hands, wrists and elbows are moistened with warm running water.
- 4.4.3.3. Subungual areas are cleaned, if necessary, under running water with a disposable nail brush.
- 4.4.3.4. Soap is applied to hands, wrists, and elbows.
- 4.4.3.5. Wash hands, wrists, and elbows by rubbing intensively all the soap-coated surfaces. Special attention is paid to the subungual areas, fingertips, thumbs, and spaces between fingers. The duration of hand washing is at least 3-5 minutes.
- 4.4.3.6. No brush is used to rub the surfaces covered with soap.
- 4.4.3.7. Soap is rinsed off with plenty of running water. Water should flow with the direction from fingers to elbows.
- 4.4.3.8. Close the tap using the elbow.

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4.4.3.9. Hands, wrists, and elbows are dried with disposable paper towels.

4.4.3.10. The used paper towel is thrown into a dedicated waste container.

4.4.4. The technique of surgical antiseptic treatment of hands

- 4.4.4.1. 10 ml of antiseptic is applied to dry hands, wrists, and elbows. Make sure that the antiseptic covers the nails, edges of the cuticle and subungual areas.
- 4.4.4.2. All surfaces are rubbed for at least 1.5 minutes, during which time the hands must be wet. Special attention is paid to the fingertips, thumbs, and spaces between fingers. Allow the hands to dry for at least 1 minute.
- 4.4.4.3. Before putting on gloves, check that the hands are dry.

4.5. Use of gloves

4.5.1. General principles of using gloves

- 4.5.1.1.Gloves are patient- and procedure-based, therefore, for single use only.
- 4.5.1.2.Before and after the gloves are used, antiseptic treatment of hands must be performed and, if necessary, hands to be washed beforehand.
- 4.5.1.3. The use of perfumed hand care products when working with gloves may cause skin irritation.
- 4.5.1.4. It is not recommended to use hand creams or ointments just before using gloves.
- 4.5.1.5. When using latex gloves, hand care products containing mineral oils, petrolatum or lanolin should not be used. These substances can cause rupture of latex gloves and promote glove permeability.
- 4.5.1.6. After exposure to contaminated body areas of the patient or contaminated environment, the used gloves should be removed and antiseptic treatment of hands performed. Before performing other procedures on the same patient, new gloves should be used if further action requires it.
- 4.5.1.7.Gloves should not be washed or treated with an antiseptic by moving from one procedure to another or moving from one patient to another.
- 4.5.1.8. Ruptured (also in the case of a puncture injury) gloves should be replaced immediately.
- 4.5.1.9.Used gloves should be removed in a manner to minimize contamination of the surroundings and skin.

4.5.2. Selection of gloves

- 4.5.2.1. Selecting suitable gloves should take into account the potential allergies of the patient or user.
- 4.5.2.2. Material of gloves
- Latex it is recommended to use latex gloves when handling cutting, puncturing or sharp tools or when exposed to blood or other bodily fluids in the course of work.
- Vinyl vinyl gloves are suitable for short-term procedures in the absence of risk of being exposed to blood or other bodily fluids.
- Nitrile nitrile gloves are used to handle chemicals and cytotoxic medications and are also suitable for use in place of latex gloves if the user has a latex allergy or skin sensitivity.
- **Plastic gloves** because the protective properties of plastic gloves are inadequate, they are unsuitable for use when there is a risk of exposure to blood and other bodily fluids.

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4.5.3. Use non-sterile gloves

- 4.5.3.1. If there is a risk of exposure to blood and other bodily fluids.
- 4.5.3.2. When inserting the peripheral venous cannula.
- 4.5.3.3. When maintaining and removing of intravenous catheters.
- 4.5.3.4. When administering medications via venous cannula.
- 4.5.3.5. When preparing medications for administration (JKL-145, JKL-140).
- 4.5.3.6. When taking a blood test.
- 4.5.3.7. When disconnecting infusion lines.
- 4.5.3.8. When performing a tracheal aspiration, if there is a closed aspiration system or in the case of an open aspiration system but a sterile terminal is used.
- 4.5.3.9. When performing a vaginal examination.
- 4.5.3.10. When emptying the bedpans.
- 4.5.3.11. When removing secretion stains.
- 4.5.3.12. When cleaning the instruments.
- 4.5.3.13. When managing waste.
- 4.5.3.14. In the case of contact isolation.

4.5.4. Use sterile gloves

4.5.4.1. In procedures requiring sterility.

4.5.5. There is no need to use gloves in the following situations (except for contact isolation)

- 4.5.5.1. When performing intramuscular and subcutaneous injections.
- 4.5.5.2. When manipulating with infusion lines without exposure to blood.
- 4.5.5.3. Oxygen administration.
- 4.5.5.4. Blood pressure, body temperature and pulse measurement.
- 4.5.5.5. Changing bed linen.
- 4.5.5.6. Dispensing food and collecting used dishes.
- 4.5.5.7. Exposure to surfaces in the close surroundings of the patient.
- 4.5.5.8. Transporting the patient.
- 4.5.5.9. Use of telephone.
- 4.5.5.10. Filling in the documentation.

REFERENCES

- JKL-186 Working clothing guide
- JKL-145 Guide for handling cytostatics
- JKL-140 Guide for preparing medicines for administration
- JKL-155 Guide to preventing the spread of Clostridium difficile with the hospital