




TRAINING MATERIALS FOR STUDENTS/TRAINEES

**The prevention of Hospital-Acquired Infections (HAI),
Health and Safety (H&S),
radiation, environmental protection and principles of
personal data protection**

3rd edition

Kraków, 20 September 2018

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 2 of 30


Content

	Introduction	p. 3
P-H-20	Preparation for work: medical and auxiliary hospital staff	p. 4
P-H-01	Hygienic hand wash	p. 5
P-H-02	Hygienic hand disinfection	p. 6
	5 momentów higieny rąk (in Polish)	p. 8
	Your 5 moments for hand hygiene (in English)	p. 9
	Procedure for using medical gloves, based on the “WHO Guidelines on Hand Hygiene in Health Care”	p. 10
P-H-08/09	Putting on and taking off non-sterile disposable medical gloves safely	p. 11
P-H-19	The use of personal protection equipment procedure	p. 12
P-Z-01	Isolation precautions procedure	p. 14
P-Z-07	Procedure to be observed after occupational exposure to blood or other potentially infectious biological material	p.18
P-M-11	Reporting and monitoring on undesirable incidents	p. 21
P-A-BPC-02	Evacuation procedure (excerpt)	p. 22
P-A-09	Disposal of medical, hazardous, other than hazardous and municipal waste procedure (excerpt)	p. 24
	The basic principles of radiation protection	p. 25
P-A-12	Principles of personal data protection at the Hospital (extract from the Personal Data Security Policy procedure)	p. 27

Binding as of:

To be updated

	Position	Name and surname	Date	Signature
Prepared by:	Head of the section for quality, hygiene, and combating hospital acquired infections	Jarosław Surowiec, MD		
	Head of the OHS and Fire Protection section	Monika Dusza, MA		
	Senior Inspector - Infrastructure Division - Administrative Section	Dorota Janicka		
	Specialist in the field of epidemiology	Jolanta Janik, MA		
	Representative of the Director for the quality management system	Barbara Sobiecka, MD, PhD		
	Data Protection Officer	Piotr Pawlikowski PhD		
Reviewed by:	Deputy Director for Treatment	Stefan Bednarz, MD, PhD		
Approved by:	Director	Barbara Bulanowska, MA		

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 3 of 30

Ladies and Gentlemen,


In connection with the Integrated Quality, Environment Management, Health & Safety and Food Safety System and the accreditation standards implemented at the Krakow University Hospital, we submit for your attention the document which presents the requirements with regard to basic principles, aimed at ensuring the safety of all personnel, patients and visitors.

Students/trainees must confirm that they agree to follow the procedures and regulations binding at the Krakow University Hospital, as described in the training materials, by signing an appropriate ***Declaration (Oświadczenie)***.

All queries or concerns with regard to this document will be answered by the person in charge of the student/trainee group, who will also be responsible for checking students' practical knowledge in: hygienic hand wash, hygienic hand disinfection, putting on and taking off safely non-sterile disposable medical gloves.

As part of the practical training, the Hospital reserves the right to conduct selective checks of the students'/trainees' knowledge of the rules of conduct described in this document, by the supervisory personnel and an epidemiology specialist. The inspection documentation will be submitted to the Hospital Directors, University Deans and Rectors.

Changes as compared to the previous version, arising out of the adjustment of the content to the updated procedures applicable at the University Hospital in Kraków and the current personal data protection regulations, have been marked in dark blue.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 4 of 30

P-H-20 Preparation for work: medical and auxiliary hospital staff

1. Procedure objective

The aim of the procedure is to familiarize medical and auxiliary hospital staff with preparations for work.

2. Definition and terminology


The hands of personnel are the major means of spreading infection in the hospital. Cleaning and disinfection are the basic, very effective ways of reducing infections. The biological cleanliness of hands is the responsibility of all medical and auxiliary staff.

Workwear is the clothing used to protect staff against direct contact with patients and their immediate surroundings (underwear, bed, medical and hygienic equipment). Every member of staff who comes into direct contact with patients, their immediate environment and biological material is required to change from private clothes to workwear.

3. Description of the procedure

- 3.1.** Put on a clean uniform and shoes immediately after coming to work/classes.
- 3.2.** All uniforms should be short-sleeved. Long sleeves should be rolled-up to 2/3 of arm's length before beginning of work/starting classes.
- 3.3.** All Staff **must wear an ID**.
- 3.4.** Long hair must be pinned up.
- 3.5.** Sitting on patient's beds when performing duties/participating in classes is forbidden.
- 3.6.** All clothes soiled with biological material must be changed immediately.
- 3.7. In the operating suites, it is forbidden to:**
 - wear watches, wedding rings, rings and bracelets on one's hands,
 - wear necklaces, earrings and other kinds of jewellery.
- 3.8. Hand hygiene in preparation for work/classes**
 - Do not wear artificial nails or tips
 - Do not paint your nails with nail varnish
 - Wear your nails short (not beyond a fingertip)
 - Remove your jewellery (wedding ring, other rings, bracelets)
 - Make sure your watch is fixed above the wrist to prevent its sliding down to the hand, otherwise take off your watch (no watches are allowed in operating theatres)
 - Cuts and abrasions on hands must be protected with a waterproof dressing.
 - After coming to work /classes perform the hygienic hand wash and hygienic hand disinfection

PH-0-1, PH-0-2

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 5 of 30

P-H-01 Hygienic hand wash

1. Procedure objective

The aim of the procedure is to familiarize students/trainees with the hygienic hand wash procedure in order to prevent the spread of infections.

2. Definitions and terminology

The hygienic hand wash substantially reduces transient microflora and guarantees that hands are cleaned of any visible dirt.

Patient zone means the patient as well as surfaces and equipment dedicated exclusively to the patient, such as objects with which the patient has direct contact, e.g. bed, bedside table, bedding, infusion pumps, monitors, other equipment and medical apparatus.

Health professional zone means all surfaces and hospital environment outside the patient zone.

3. Description of the procedure

3.1. The hygienic hand wash should be performed:

- after coming to work/classes
- when hands are visibly dirty
- before eating a meal
- before coming into contact with food
- after leaving the toilet
- before aseptic procedure (e.g. Central Venous Catheterization procedure)
- after contact with blood or body fluids
- after contact with patients and their surroundings in the case of *Clostridium difficile*, *Clostridium perfringens*,
- before leaving work/classes.

Apply hand moisturizer regularly to protect your skin from the drying caused by frequent hand washing and disinfection at work/during classes.

3.2. Hygienic hand wash algorithm /in compliance with PN – EN 1499/

3.2.1. Hand washing - 60 seconds:


- wet your hands with lukewarm running water
- cup your hands together and get 3-5ml of soap from a soap dispenser
- wash your hands with the technique of hygienic hand wash and hand disinfection according to Ayliffe, to make sure they are thoroughly covered with a detergent
- wash your hands and wrists 5 times (performing all the washing steps from 1 to 6).

3.2.2. Rinsing - 15 seconds:

- rinse your hands thoroughly under running water
- turn off the tap using a dry disposable towel

3.2.3. Drying:

- dry your hands thoroughly with disposable paper towels
- place the dirty towels in a blue bag for medical waste

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 6 of 30

P-H-02 Hygienic hand disinfection

1. Procedure objective

The aim of the procedure is to perform hygienic hand disinfection, in order to prevent the spread of infections.

2. Definitions and terminology

Hygienic hand disinfection eliminates transient microbial flora while also reducing resident skin flora. Hygienic disinfection does not remove dirt.

Patient zone means the patient as well as surfaces and equipment dedicated exclusively to the patient, such as objects with which the patient has direct contact, e.g. bed, bedside table, bedding, infusion pumps, monitors, other equipment and medical apparatus.

Health professional zone means all surfaces and hospital environment outside the patient zone.

3. Description of the procedure


3.1. Hygienic hand disinfection is required:

- upon arrival at work/class
- before putting on and after removing medical gloves,
- before working with sterile equipment,
- before entering and after leaving an isolation room,
- before starting and after completing a (medical, care) procedure on a patient,
- before packing medical devices which are to be sterilised,
- before leaving work/class,
- while performing procedures that include hygienic hand disinfection,
- while fulfilling the instructions of the WHO – “5 moments for hand hygiene”:
 - before contact with a patient,
 - before a clean, aseptic procedure on a patient,
 - after contact with blood and body fluids,
 - after contact with a patient,
 - after contact with patient surroundings.

3.2. Hygienic hand disinfection algorithm /according to PN – EN 1500/

3.2.1. Disinfection – 30 seconds

- a disinfectant must be applied to dry hands only
- switch on the disinfectant dispenser
- put your hands together, apply 3-5ml of the disinfectant from the dispenser
- rub the disinfectant into your hands and wrists for 30 seconds, using the Ayliffe hand disinfection technique, to make sure your hands are thoroughly covered with the preparation
- disinfect your hands by rubbing the disinfectant 5 times into your hands (repeating steps 1-6); total disinfection time must be 30 seconds
- pay special attention to fingertips, thumbs and the space between fingers
- rub the disinfectant into your hands until they are entirely dry.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 7 of 30

Hygienic hand wash and hygienic hand disinfection technique according to Ayliffe



Stage 1

Palm to palm



Stage 2

Right palm over left dorsum and left palm over right dorsum



Stage 3

Palm to palm and fingers interlocked



Stage 4

Backs of fingers to opposing palms with fingers interlocked



Stage 5

Rotational rubbing of right thumb clasped in left palm and vice versa

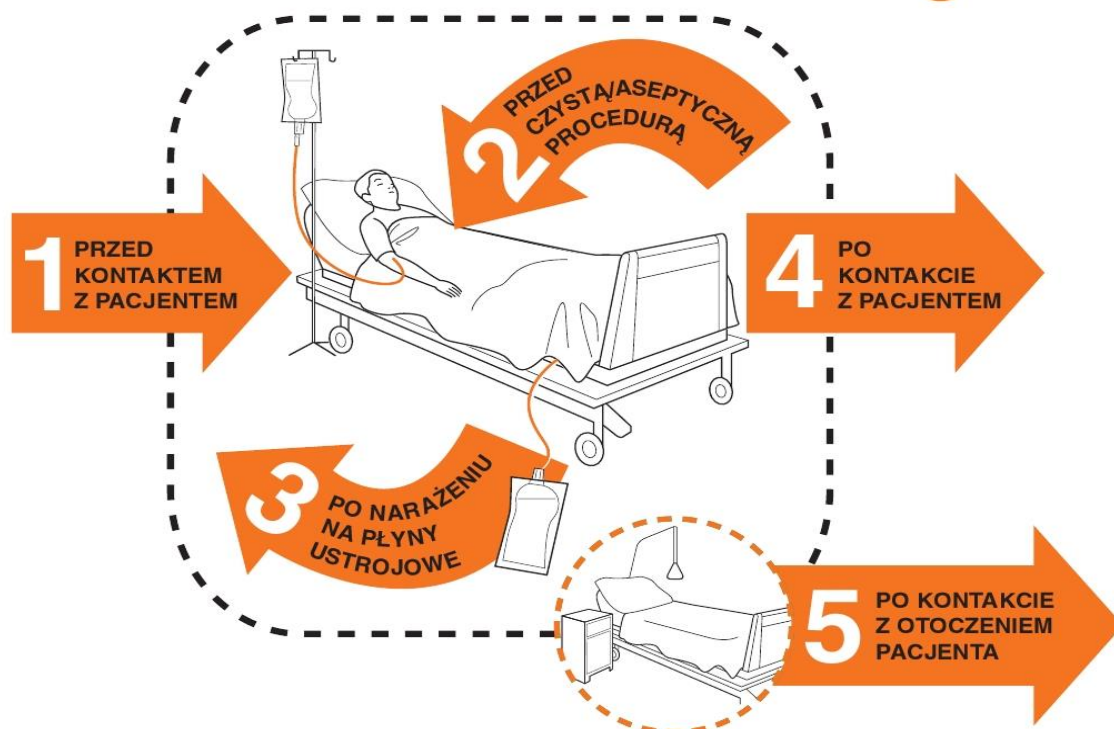


Stage 6

Rotational rubbing backwards and forwards with clasped fingers of right hand in left palm and vice versa



5 MOMENTÓW HIGIENY RĄK



1	PRZED KONTAKTEM Z PACJENTEM	KIEDY? DLACZEGO?	Dezynfekuj ręce przed każdym kontaktem z pacjentem Aby chronić pacjenta przed chorobotwórczymi drobnoustrojami przenoszonymi na Twoich rękach
2	PRZED CZYSTĄ/ASEPTYCZNĄ PROCEDURĄ	KIEDY? DLACZEGO?	Dezynfekuj ręce tuż przed wykonaniem czystej/aseptycznej procedury Aby chronić pacjenta przed chorobotwórczymi drobnoustrojami, również pochodzącymi od niego samego
3	PO NARAŻENIU NA PŁYNY USTROJOWE	KIEDY? DLACZEGO?	Dezynfekuj ręce po możliwym kontakcie z płynami ustrojowymi (również po zdjęciu rękawic) Aby chronić siebie i otoczenie przed chorobotwórczymi drobnoustrojami
4	PO KONTAKCIE Z PACJENTEM	KIEDY? DLACZEGO?	Dezynfekuj ręce bezpośrednio po kontakcie z pacjentem i jego najbliższym otoczeniem Aby chronić siebie i otoczenie przed chorobotwórczymi drobnoustrojami
5	PO KONTAKCIE Z OTOCZENIEM PACJENTA	KIEDY? DLACZEGO?	Dezynfekuj ręce po dotknięciu jakiegokolwiek przedmiotu z otoczenia pacjenta, gdy opuszczasz to otoczenie – nawet jeśli nie miałeś kontaktu z pacjentem Aby chronić siebie i otoczenie przed chorobotwórczymi drobnoustrojami



World Health
Organization

Patient Safety
A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use. WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.



Szpital Uniwersytecki
w Krakowie

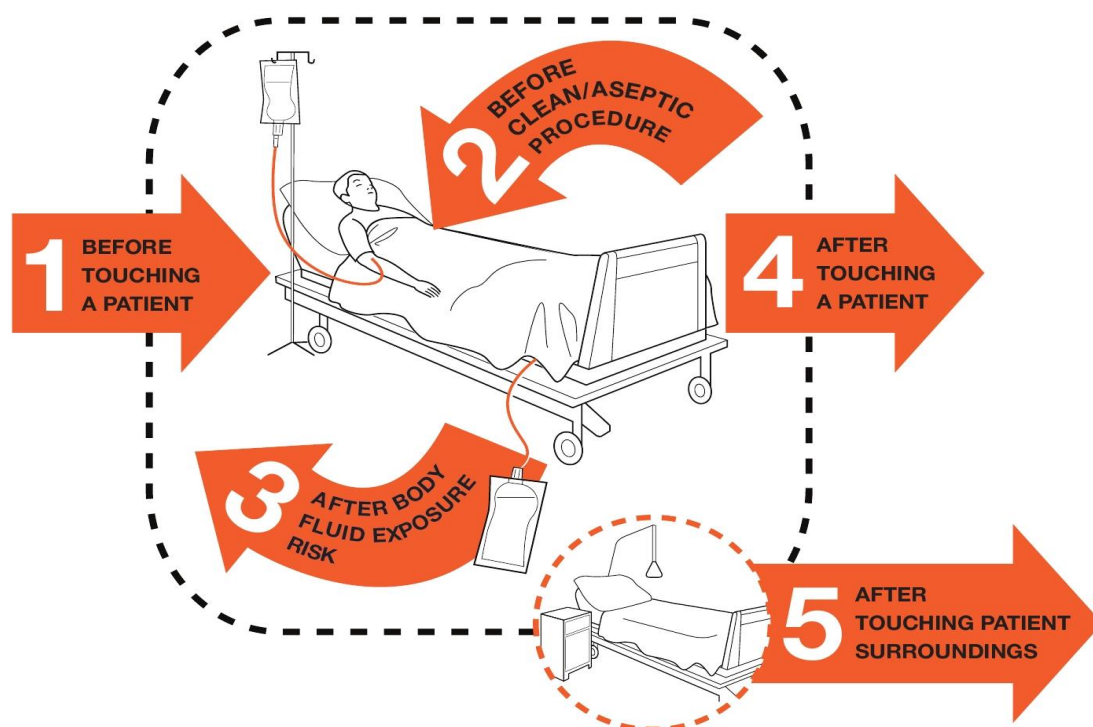
TRAINING FOR STUDENTS/TRAINEES

On the prevention of HAI, H&S, radiological, environmental
protection and principles of personal data protection

3rd edition
dated 20.09.2018 r.

Page: 9 of 30

Your 5 Moments for Hand Hygiene



1	BEFORE TOUCHING A PATIENT	WHEN?	Clean your hands before touching a patient when approaching him/her.
		WHY?	To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ASEPTIC PROCEDURE	WHEN?	Clean your hands immediately before performing a clean/aseptic procedure.
		WHY?	To protect the patient against harmful germs, including the patient's own, from entering his/her body.
3	AFTER BODY FLUID EXPOSURE RISK	WHEN?	Clean your hands immediately after an exposure risk to body fluids (and after glove removal).
		WHY?	To protect yourself and the health-care environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WHEN?	Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side.
		WHY?	To protect yourself and the health-care environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WHEN?	Clean your hands after touching any object or furniture in the patient's immediate surroundings, when leaving – even if the patient has not been touched.
		WHY?	To protect yourself and the health-care environment from harmful patient germs.



**World Health
Organization**

Patient Safety


A World Alliance for Safer Health Care

SAVE LIVES
Clean Your Hands

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization be liable for damages arising from its use.


WHO acknowledges the Hôpitaux Universitaires de Genève (HUG), in particular the members of the Infection Control Programme, for their active participation in developing this material.

May 2009

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 10 of 30

Procedure for using medical gloves, based on the “WHO Guidelines on Hand Hygiene in Health Care – Hand Hygiene Means Safe Care”

1. Always use medical gloves if required by the **medical, care or isolation procedure**.
2. Use medical gloves whenever **you can reasonably expect that you will come in contact with blood or other potentially infectious biological material, mucous membranes or damaged skin**.
3. When you finish a medical procedure, remove medical gloves safely and place them in a red bag for medical waste.
4. It is strictly forbidden to use the same gloves to perform procedures on more than one patient.
5. When performing a patient procedure, medical gloves should always be changed when moving from the infected parts of the body to other areas, and also when coming into contact with damaged skin or mucous membranes.
6. When no longer needed, the gloves must be taken off safely and hygienic hand disinfection must be performed.
7. The use of medical gloves does not, in any sense, replace proper hand hygiene with preparations dedicated to hygienic hand disinfection.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 11 of 30

P-H-08/P-H-09 Putting on and taking off non-sterile disposable medical gloves safely

1. Objectives

It is the aim of the procedure to provide instructions for putting on and taking off non-sterile disposable medical gloves safely, and also for the prevention of infections and protection against dangerous biological and chemical agents.

2. Definitions and terminology

Non-sterile disposable medical gloves are used for individual protection in healthcare, to protect patients, medical and auxiliary personnel against infections. They also protect staff against chemical agents, such as disinfectants, medication, and cytostatics.

3. Description of the procedure


3.1. Putting on non-sterile disposable medical gloves

- 3.1.1. Disinfect your hands according to the Hygienic Hand Disinfection Procedure **P-H-02**.
- 3.1.2. Take the first glove out of the package, restricting to a minimum the contact of your hand with the outer surface of the glove
- 3.1.3. Fold out the cuff of the first glove from the inside.
- 3.1.4. With your right hand hold the cuff of the glove and put your left hand in.
- 3.1.5. Take the second glove out of the package with the gloved hand.
- 3.1.6. Fold out the cuff of the second glove from the inside.
- 3.1.7. With your left hand hold the cuff of the second glove and put the right hand in.
- 3.1.8. With your left hand pull and stretch the cuff of the right glove.
- 3.1.9. With your right hand pull and stretch the cuff of the left glove.
- 3.1.10. Change your gloves immediately if they are pierced, cut or otherwise damaged.

3.2. Safe removal of medical gloves (according to J.W. Brown and H. Blackwell)

- 3.2.1. With your thumb and index finger pinch the glove on the other hand below wrist level.
- 3.2.2. Peel away from the hand, thus allowing the glove to turn inside out.
- 3.2.3. Roll the removed glove with the gloved hand.
- 3.2.4. Insert the index finger of the ungloved hand into the glove on the other hand, always bearing in mind that the outside of a glove is contaminated.
- 3.2.5. Peel the glove from the second hand, rolling it out inside out and making sure the outer layer is rolled inside.
- 3.2.6. Dispose of the gloves into a red bag for medical waste
- 3.2.7. Disinfect your hands according to hygienic hand wash or hygienic hand disinfection procedures, i.e. **P-H-01, P-H-02**.

3.3. It is forbidden to carry clean and used medical gloves in the pockets of work clothes.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 12 of 30

P-H-19 Procedure for the use of personal protection equipment

1. Objective

The aim of the procedure is to provide instructions for the proper use of personal protection equipment to prevent the spread of infections.

2. Definition and terminology

Personal protection equipment – devices or equipment intended to be worn or held by staff in order to provide protection against a threat of one or more hazards that may affect their health or work safety.

Caps - used to protect hair against pollution from a patient's biological material. They also provide protection against hair falling into a sterile operating field, sterile occupancy of the operating field, tools, materials and equipment prepared for sterilization, and also for preparing and serving food to patients.

Safety glasses, goggles, face shields - used to protect the eyes from contact with biological material or chemicals.

Disposable protective masks - used to reduce direct transmission of infection between staff and patient, and to provide protection against chemical agents e.g. in preparation of working solutions of disinfectants, cytostatics, etc.

Disposable protective aprons (plastic or interface) - used to protect staff and their working clothes from contact with biological material and chemicals.

Disposable medical gloves – a means of personal protection used in healthcare to protect patients and staff from infections. They also provide protection for staff against chemical agents e.g. in preparation of working solutions of disinfectants, cytostatics, etc.

3. Description of the procedure

3.1. Perform the hygienic hand wash or hygienic hand disinfection (**P-H-01, P-H-02**) procedure prior to putting on or taking off an item of personal protection equipment.

3.2. Caps

3.2.1. Clean caps:

- put the cap on, making sure all your hair is covered.
- If your cap does not become contaminated with biological material, you can wear it throughout the shift.


3.2.2. Dirty caps:

- Caps that become contaminated with biological material, and also those that are used during invasive procedures, must be taken off immediately after and placed in a red bag for medical waste.
- Caps that are contaminated with biological material must be taken off in non-sterile disposable gloves.
- Do not wear the same cap more than once.
- Do not carry a used cap in your pocket.

3.3. Protective glasses, goggles, face shields

3.3.1. These need to be worn for every procedure that might pose a risk of contact with biological or chemical material.

3.3.2. Take your protective glasses/goggles/face shield off when you complete the procedure.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 13 of 30

3.3.3. Disposable glasses/goggles/face shields must be placed in a red bag for medical waste; re-usable glasses/goggles/face shields need to be passed on for disinfection.

3.3.4 Do not carry protective glasses in your pockets.

3.4 Protective masks:

3.4.1. Putting on a mask:

- a) Take a disposable mask out of its packaging and put it on your face, making sure the hard end is at the top.
- b) Form a “nose” on the top part, halfway through its width.
- c) Model and fit the mask, making sure that it fits well on your face and under your chin.
- d) Fix it tightly by tying the strings or adjusting the rubber bands.

3.4.2. Taking off the mask:

- a) Take your mask off without touching the face-protecting part by untying the strings or taking off the rubber bands
- b) Immediately after taking the used mask off, place it in a red bag for medical waste.

3.4.3. Protective masks need to be replaced after each use or whenever they become moist with perspiration or contaminated with biological material.

3.4.4. Do not wear the same mask more than once.

3.4.5. It is forbidden to carry clean and used masks in one's hands, in the pockets of work clothes, on one's head, below the chin or below the nose.

3.5 Disposable protective aprons (interlining, plastic)


3.5.1 An apron must be put on directly before contact with a patient, or biological or chemical materials.

3.5.2 Fix the apron by tying strings or seal the Velcro at the back.

3.5.3 After the performed procedure, contact with isolated patient, or biological or chemical material, take off the apron and place it in a red bag for medical waste.

3.5.4 After contact with cytostatics an apron must be placed in a yellow bag for medical waste.

3.5.5 If an apron is used for protective isolation, it must be disposed of in a blue bag for medical waste.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 14 of 30

P-Z-01 Patient isolation precautions

1. Procedure objective

The aim of the procedure is to provide instructions for precautions to be taken when it is necessary to isolate a patient to prevent the spread of an infection.

2. Definitions and terminology

Isolation – isolating a person or persons who are infected with an infectious disease or a person or persons who are suspected to have been infected with an infectious disease to make it impossible for the pathogenic biological agent to spread to other persons.

Standard precautions involve routine precautions taken for all patients, independently of their condition.

Contact precautions used to prevent the transfer of microorganisms from an infected or colonized patient through direct contact, e.g. by touch or indirect contact, the surroundings of the patient, the hospital environment

Common conditions that require Contact Precautions:


- streptococcal infections (*Streptococcus pyogenes*, *Streptococcus agalactiae*, *Streptococcus pneumoniae*)
- *Staphylococcus aureus*- MRSA
- meningococcal infection (*Neisseria meningitidis*)
- Vancomycin-resistant *Enterococcus* - VRE
- *Clostridium difficile*
- *Clostridium perfringens*,
- intestinal infections caused by *Salmonella*, *Shigella*,
- rotaviruses.
- *Enterobacteriaceae* producing carbapenemases of *KPC*, *MBL-NDM*, *OXA-48* type.

Droplet precautions - prevents the transmission of microorganisms by aerosol particles with a diameter above 5µm, generated during speaking, coughing, sneezing, and procedures performed in the respiratory tract of an infected patient, e.g. bronchoscopy, suction, intubation, physiotherapy. Because of their large size, these particles do not remain suspended in the air long and can be transferred over a distance of 1-2m.

Common conditions that require Droplet Precautions:

- bacterial infections caused by *Haemophilus influenza* type b
- meningococcal infection (*Neisseria meningitidis*)
- penicillin-resistant pneumococcus (*Pseudomonas aeruginosa*)
- pyogenic streptococcus responsible for pharyngitis
- flu
- pulmonary tuberculosis

Airborne precautions prevent transmission of microorganisms by condensation nuclei or contaminated dust particles with a diameter less than 5 µm. The particles are carried by air currents over long distances and can stay in the air for a long period of time.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 15 of 30

Common conditions that require Airborne Precautions:

- tuberculosis
- measles
- chicken pox

Protective precautions - used with patients with severe immunosuppression who are very sensitive to infections (e.g. transplant patients).


Description of the procedure

5.1. Standard precautions

- 3.1.1 Perform hygienic hand disinfection using procedure **P-H-02**.
- 3.1.2 Depending on the threat use personal protection equipment (medical gloves, protective apron, protective mask) **P-H-19**.
- 3.1.3 Segregate medical waste at source.
- 3.1.4 Change bedding as required.

5.2. Contact precautions

- 5.2.1 Identify a separate room with a toilet.
- 5.2.2 If it is impossible to use a single room, identify a separate isolation area in the patients' room.
- 5.2.3 Reduce to a minimum the number of people staying in the isolation zone.
- 5.2.4 The decision to limit the visits is made by a physician.
- 5.2.5 The door to the room does not have to be closed.
- 5.2.6 Prior to contact with the patient and before performing a clean/aseptic procedure:
 - perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
 - wear medical gloves
 - wear other personal protection equipment **P-H-19** used in conditions of biological threat
- 5.2.7. Remove personal protection equipment after use and place it in a red bag for medical waste.
- 5.2.8. After contact with a patient and his or her surroundings perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.2.9. After contact with biological material perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.2.10. Place the used disposable medical equipment in a red bag for medical waste or in a hard-walled container.
- 5.2.11. Identify re-usable medical equipment to be used with this patient only.
- 5.2.12. Re-usable medical equipment (also the separated items) must be decontaminated after use, adequate to the level of biological threat.
- 5.2.13. Decontamination of equipment is the responsibility of the staff who have used it.
- 5.2.14. The change of patient's underwear, bed linen and personal toilet must be performed daily and when necessary.
- 5.2.15. In justified cases, use disposable bedding.
- 5.2.16. Dirty cotton underwear and bedding must be treated as infectious. It should be packed into a black bag in a place of isolation, labelled as infectious and passed on to the laundry.
- 5.2.17. Material for the laboratory and microbiological tests must be collected at the site of isolation.
- 5.2.18. In justified cases, use disposable cutlery and plates.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 16 of 30


- 5.2.19. Segregate waste at the site of isolation.
- 5.2.20. The patient's transport must be reduced to an absolute minimum. During transportation follow the procedure for contact precautions.

5.3. Droplet precautions.

- 5.3.1. Patients must be kept in a single isolation room with a separate bathroom and toilet.
- 5.3.2. If possible, identify the medical staff responsible for a patient's treatment and care.
- 5.3.3. Restrict to a minimum a number of people staying in the isolation zone.
- 5.3.4. The door to the isolation room should be closed.
- 5.3.5. Wear a protective mask before entering the isolation room.
- 5.3.6. Prior to contact with the patient and before performing a clean/aseptic procedure:
- perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
 - wear medical gloves
 - wear other personal protection equipment **P-H-19** used in conditions of biological threat
- 5.3.7. Take off the disposable protective equipment after use and place it in a red bag. Identify re-usable medical equipment to be used with this patient only.
- 5.3.8. After contact with a patient perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.3.9. After contact with biological material perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.3.10. Segregate waste at the site of isolation.
- 5.3.11. Used disposable medical equipment must be placed in a red bag for medical waste or in a hard container.
- 5.3.12. Identify re-usable equipment that will be used with the contaminated patient only.
- 5.3.13. Reusable medical equipment (also the separated items) must be decontaminated after use, adequate to the level of biological threat
- 5.3.14. Proper decontamination of equipment is the responsibility of the staff who have used it.
- 5.3.15. The change of a patient's underwear, bed linen and personal toilet must be performed daily and when necessary.
- 5.3.16. Dirty cotton underwear and bedding must be treated as infectious. It should be packed into a black bag in the place of isolation, labelled as infectious and passed on to the laundry room.
- 5.3.17. Material for the laboratory and microbiological testing must be collected at the site of isolation.
- 5.3.18. The patient's transport must be reduced to an absolute minimum. During transportations follow the procedure for droplet precautions.
- 5.3.19. **Patients must wear protective masks upon leaving the isolation room and during transport**

5.4. Airborne precautions

- 5.4.1. Patients must be kept in a single isolation room with a separate bathroom and toilet.
- 5.4.2. **The door to the isolation room must be closed.**
- 5.4.3. If possible, identify the medical staff responsible for a patient's treatment and care.
- 5.4.4. **Wear a protective mask before entering the isolation room.**
- 5.4.5. Prior to contact with the patient and before performing the clean/aseptic procedure:
- perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
 - wear other personal protection equipment **P-H-19** used in conditions of biological threat


 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 17 of 30

- wear medical gloves.

- 5.4.6 Take off the disposable protective equipment after use and place it in a red bag.
- 5.4.7 After contact with a patient perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.4.8 After contact with biological material perform the hygienic hand disinfection or hygienic washing and hygienic hand disinfection **P-H-01, P-H-02**
- 5.4.9 Used disposable medical equipment must be placed in a red bag for medical waste or in a hard container.
- 5.4.10 Identify re-usable equipment that will be used with the contaminated patient only.
- 5.4.11 Reusable medical equipment (also the separated items) must be decontaminated after use, adequate to the level of biological threat.
- 5.4.12 Proper decontamination of equipment is the responsibility of the staff who have used it.
- 5.4.13 The change of a patient's underwear, bed linen and personal toilet must be performed daily and when necessary.
- 5.4.14 Dirty cotton underwear and bedding must be treated as infectious. It should be packed into a black bag in a place of isolation, labelled as infectious and passed on to the laundry room.
- 5.4.15 Material for laboratory and microbiological testing must be collected at the site of isolation.
- 5.4.16 All waste must be segregated at the site of isolation and disposed of in the red bag for medical waste or hard container.
- 5.4.17 Patients must wear a protective mask **upon leaving the isolation room and during transport.**

5.5. Protective precautions.

- 5.5.1. Patients must be kept in a single isolation room with a separate bathroom and toilet.
- 5.5.2. The door to the isolation room **must always be closed.**
- 5.5.3. Before entering and upon leaving the room, disinfect the hands or wash and disinfect the hands **P-H-01, P-H-02.**
- 5.5.4. Wear personal protection equipment (protective apron, mask) (**P-H-19**) prior to entering the room.
- 5.5.5. Wear medical gloves in the patient's room.
- 5.5.6. Reusable medical equipment (also the separated items) must be decontaminated after use, adequate to the level of biological threat
- 5.5.7. Proper decontamination of equipment is the responsibility of the staff who have used it.
- 5.5.8. All tests and procedures must be performed in the patient's room.
- 5.5.9. Any other tests or procedures must be performed in a way that prevents the patient's contact with other patients.
- 5.5.10. The change of the patient's underwear, bed linen and personal toilet must be performed daily and when necessary.
- 5.5.11. All waste must be segregated at the site of isolation and disposed of at least twice a day.
- 5.5.12. Restrict the number of persons in contact with the patient.
- 5.5.13. Anyone who enters the patient's room should be healthy and free of any infections.
- 5.5.14. Transport of the patient should be restricted to the necessary minimum; observe the principles of protective isolation during transport.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 18 of 30

P-Z-07 Procedure to be observed after occupational exposure to blood or other potentially infectious biological material

1. Objective

The aim of the procedure is to provide instructions for correct behaviour after occupational exposure to blood or other potentially infectious biological material, so as to prevent the spread of infection to medical and auxiliary staff. The procedure includes guidelines for post-exposure prophylaxis.

2. Definitions and terminology

Occupational exposure is the exposure to infection with pathogenic microorganisms, as a result of contact with biological material in the course of work.

Infection can occur through:

- tearing of the skin by pricking, scratching, laceration with a tool stained with biological material
- contact of the damaged skin with biological material
- contamination of mucous membranes or conjunctiva with biological material.

Infectious biological material:

- blood
- excretions and secretions containing visible admixtures of blood (urine, feces, saliva, sputum, vomit, nasal secretions, sweat, tears)
- other potentially infectious biological material - fluids: cerebrospinal, pleural, peritoneal, pericardial, amniotic; synovial fluid; breast milk; vaginal secretions; semen; tissue or microbial culture.

3. Description of the procedure

3.1. Local procedure after occupational exposure:

a) Exposure of undamaged skin - immediately after exposure:

- wash skin with plenty of cold, running water and liquid soap
- perform disinfection of exposed skin

Further post-exposure prophylaxis does not apply after the exposure of undamaged skin.


b) Exposure of the skin - piercing, laceration, damaged skin - immediately after exposure:

- wash skin with plenty of cold, running water and liquid soap
- do not obstruct the bleeding, do not squeeze the wound
- do not use disinfectants
- secure the injury with sterile, waterproof dressings

c) Exposure of conjunctiva and mucous membranes – immediately after exposure:

- rinse the conjunctiva several times, with open eyelids, with water or a 0.9% NaCl solution
- remove contact lenses before rinsing the conjunctiva
- do not wipe the conjunctiva with gauze
- rinse the mucosa of the oral and nasal cavities with cold water, or a 0.9% solution of NaCl
- do not use disinfectants.

Report the incident to the supervisor/medical personnel in your ward/unit.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 19 of 30


3.2 Medical procedure applicable after occupational exposure to blood:

3.2.1. Exposed person:

- Immediately after securing the place of exposure, 5ml of blood needs to be taken from the exposed person (2 EDTA tubes marked “for morphology testing”) and sent for serological testing to the Department of Microbiology of the University Hospital, together with “The Order for Molecular and Serological Tests” (with extra note: “Exposure – student/apprentice”). The Order needs to be signed by the doctor on duty or doctor at the clinic in which the exposure occurred. The aim of the test is to determine the serological status of the exposed person at the time of exposure.
- If the exposed person does not give consent to blood sampling, it should be noted in the Occupational Exposure Chart Appendix 01-PZ-07. Do not take a blood sample in such a case.
- Blood is taken from the exposed person to determine the anti-HIV/p24, anti-HCV, anti-HBc and HBsAg and in people vaccinated against hepatitis type B, also anti-HBs.
- In the “Comments” section of the “Order” add the name and social security number (Polish: PESEL) of the exposed patient (after the patient expresses his/her consent in the Declaration of Consent ZAŁ 02-P-Z-07)
- The Department of Microbiology will send the results of the serological tests of the exposed patient or potentially exposed patient to the Clinical Department of Infectious Diseases, to the doctor handling the post-exposure prophylaxis in an envelope marked with the name of the exposed person and the words “occupational exposure”.
- The exposed person should immediately (no later than 48 hours following the exposure) report to the Infectious Diseases specialist, who makes a decision on whether post-exposure prophylaxis is needed or not.
- The Prevention of infection after exposure is more effective when applied early. Do not delay post-exposure prophylaxis by awaiting test results. The decision on whether to undertake prophylaxis or not should follow the clinical assessment of the risk of infection.**

3.2.2. The person who is a potential source of the exposure:

- With the consent** of the person who is a potential source of the exposure, expressed in the “Declaration of Consent” ZAŁ 02-P-Z-07, immediately after exposure, 5ml of blood needs to be taken (2 EDTA tubes marked “for morphology testing”) and sent for serological testing to the Department of Microbiology of the University Hospital, to determine the serological status at the time of exposure. The Comments section of the Order for Molecular and Serological Tests should include the words “**Occupational exposure of a student/trainee**” and should be signed by a doctor on duty or doctor in the surgery in which the exposure occurred.
- If the person who is a potential source of exposure does not give consent to serological (or in some cases also molecular) tests, it should be noted in the Declaration of Consent ZAŁ 02-PZ-07 and in the Occupational Exposure Chart ZAŁ 01-P-Z-07. Do not take a blood sample in such a case.
- Blood is taken from the person who is a potential source of exposure to determine the anti-HIV/p24, anti-HCV, anti-HBc Total and HBsAg.
- If the person who is a potential source of exposure is HIV positive, take 2.6ml of blood (in EDTA tube labelled “for morphology”) to determine the level of **HIV-RNA viral load** (Department of Microbiology, University Hospital) and so determine the stage of the disease. The test is carried out with the consent of the patient. This needs to be marked on the Declaration on Consent ZAŁ 02-P-Z-07, and also on “The Order for molecular and serological tests”.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 20 of 30

- e) The Declaration of Consent ZAŁ 02-P-Z-07 and results of serological and molecular tests of a patient who is potentially a source of exposure are then included in the patient's documentation (Patient's Documentation/Ambulatory Chart).

3.2.3. The University Hospital provides access to a doctor authorized to implement the post-exposure procedure 24h, 7 days a week, also on public holidays, at the following locations:


- Poradnia Nabytych Niedoborów Odporności, OK. Chorób Zakaźnych (Acquired Immunodeficiency Clinic, Department of Infectious Diseases), **ul. Śniadeckich 16** – Mon - Fri 8.00-14.00; extension: 73 56,
- OK. Chorób Zakaźnych (Department of Infectious Diseases) **ul. Śniadeckich 5** (open 24h) – Doctor on duty in the afternoons and at night; also on the days free of work (Sat, Sun, public holidays); extension 7355.

3.3 Procedure applicable after exposure to any other potentially infectious biological material:

- In the case of exposure to any other potentially infectious biological material, such as the following fluids: cerebrospinal, pleural, peritoneal, pericardial, amniotic, synovial fluid, breast milk, vaginal secretions, semen and also tissue or microbiological cultures, a sample of the material should be taken for microbiological examination, in justified cases, and sent to the Department of Microbiology, University Hospital, marked "Occupational exposure student/trainee – source". In the Comments section of "The Order for Microbiological Tests" add the name and surname of the exposed person.
- The Department of Microbiology will send the test results directly to the exposed person (clinical department/clinic). The envelope should be marked with the person's name, surname and the words "Occupational exposure".
- If the result of the microbiological test is positive, the exposed person should report to the infectious diseases specialist to begin the post-exposure procedure.

3.4 Occupational Exposure Card

- The person exposed to occupational hazards has to fill in the Occupational Exposure Card (ZAŁ 01-P-Z-07).
- The Occupational Exposure Card form (01-P-Z-07) and the Declaration of Consent (ZAŁ 02-P-Z-0) are stored in the location identified by the supervisor or in the same place as the forms for ordering tests.
- If a student/trainee suffers from occupational exposure during training at the University Hospital, they are liable to post-exposure treatment.
 - The completed Occupational Exposure Card must be passed on to the immediate supervisor (chief surgeon, ward nurse) without delay.
 - The supervisor shall send the original of the Occupational Exposure Card to the Health and Safety Department of the University Hospital, and leave a photocopy of it in a separate binder marked 'occupational exposure'.
 - The Health and Safety Department provides information on occupational exposure in the form of report to the Hospital Infection Control Team once a quarter (up to 15 April, July, October, and January).

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 21 of 30

P-M-11 Reporting and monitoring of undesirable incidents

Definitions and terminology


Undesirable incident – damage caused during treatment or as a result of it, which is not linked to the natural course of the disease, medical condition of the patient or the risk of its occurrence

The following are examples of undesirable incidents:

- improper administration of a drug (wrong drug, dose, patient, time of administration, type of administration)
- falls in the hospital
- unauthorized leave of a patient from the hospital
- other incidents which, in the opinion of staff, should be reported.

STUDENT’S/TRAINEE’S OBLIGATION

Students/trainees must inform their teacher/hospital personnel of every instance of an undesirable incident.

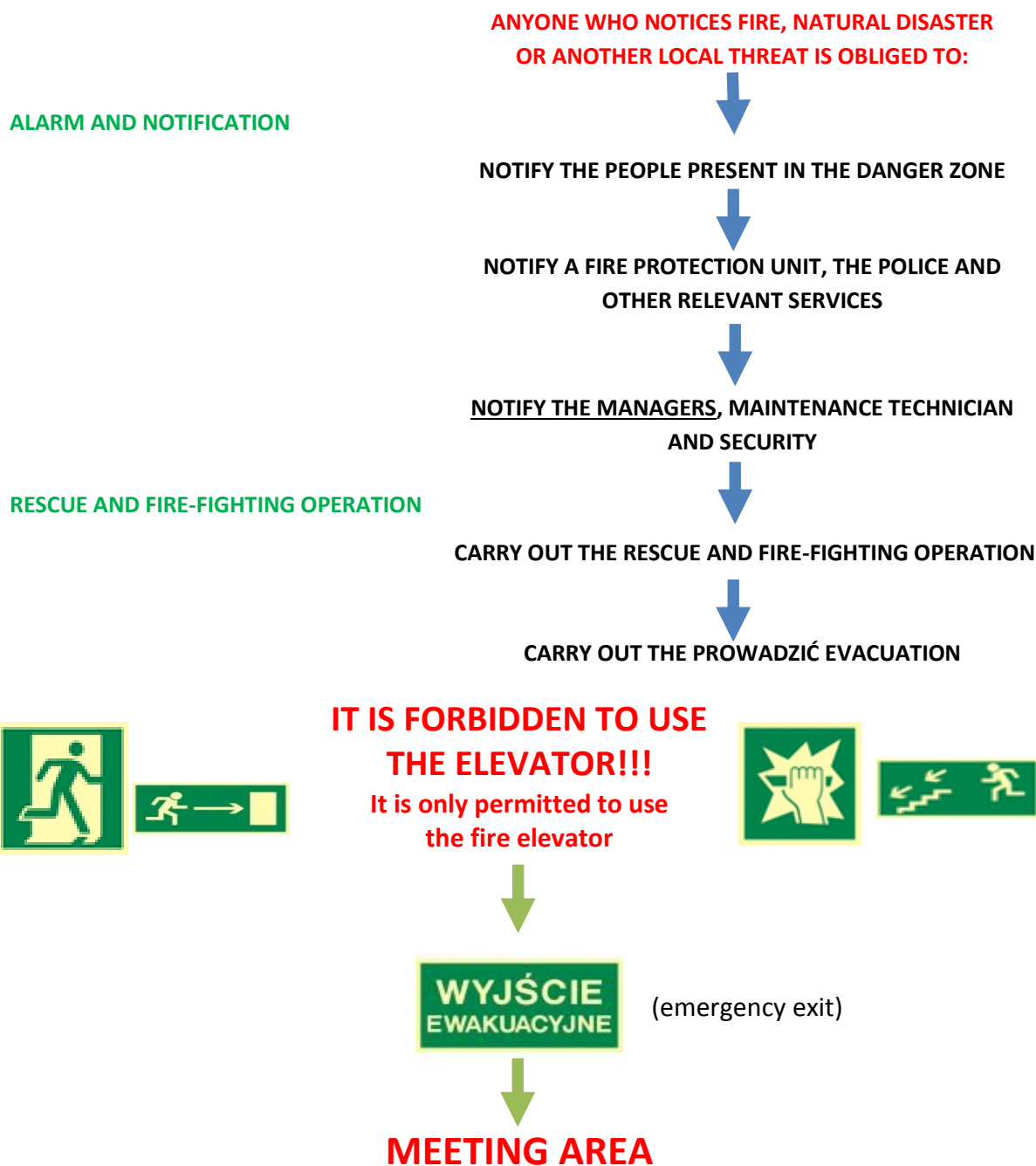
 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 22 of 30

P-A-BPC-02 Evacuation


SHOULD YOU NOTICE FIRE OR ANY SIGNS OF IT, KEEP CALM AND MAKE SURE YOU DO NOT CAUSE PANIC

STUDENT'S/TRAINEE'S OBLIGATIONS

1. If you notice any hazard please follow the instructions below:



EVERYONE WHO PARTICIPATES IN THE EVACUATION IS OBLIGED TO STAY IN THE MEETING AREA UNTIL GUIDELINES FOR FURTHER ACTION ARE PROVIDED

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 23 of 30


2. If you are involved in evacuation

- 1) Make sure that people around you are also aware of the danger; if you think they are not, calmly inform them of the danger
- 2) Listen to the commands of the person in charge of the evacuation
- 3) Go to the nearest emergency exit
- 4) Behave calmly, move quickly but do not run
- 5) Do not overtake others because you will make it more difficult for yourself and others to get to the exit
- 6) Watch the evacuation signs
- 7) Go to a place where you will not interfere with others leaving the building or the work of rescuers (evacuation reporting sites are separate for each building)
- 8) If you are an organized group, try to stay with your group members as this will enable the person in charge of the evacuation to check if everyone has left the building
- 9) Do not panic during the evacuation; try to calm down those people who are afraid, help people with disabilities
- 10) Try to be visible; if you are cut off from escape routes cry out for help by screaming or making other noises i.e. by knocking on a pipe, wall or door. Such behavior will help firefighters find you.

**FOLLOWING THESE RULES MIGHT HELP YOU SAVE YOUR OWN LIFE
AND THE LIVES OF OTHERS**

List of post-evacuation meeting points, by building:

1. Botanical 3 - car park by the driveway for ambulances
2. Grzegórzecka 18 - main car park
3. Kopernika 15 - car park at the haematology ward
4. Kopernika 15B - between the buildings at ul. Kopernika 15 and 17
5. Kopernika 15C - between the buildings at ul. Kopernika 15 and 15b
6. Kopernika 17 - inner car park, opposite ul. Kopernika 17
7. Kopernika 19 - car park between the workshops and pharmacy
8. Kopernika 19 old kitchen - car park between the workshops and pharmacy
9. Kopernika 19a - car park between the pharmacy and the school of Child and Adolescent Psychiatry
10. Kopernika 19c - near the old landing site
11. Kopernika 21 – car park between ul. Kopernika 21a and 19a
12. Kopernika 21b - at the entrance to the car park by the Psychiatry Ward
13. Kopernika 23 – ul. Kopernika between buildings 23 and Śniadeckich 2
14. Kopernika 38 - car park behind the hospital directors' office building
15. Kopernika 40 - car park behind the hospital directors' office building
16. Kopernika 50 – Emergency Room car park
17. Kopernika 36 - car park behind the directors' offices building
18. Śniadeckich 2 – ul. Kopernika between buildings 23 and Śniadeckich 2
19. Śniadeckich 3 – football pitch
20. Śniadeckich 5 - near the old landing site
21. Śniadeckich 10 - car park between ul. Śniadeckich 10 and 2
22. Śniadeckich 14 - car park ul. Śniadeckich between 12 and 14 (laundry room and boiler room)
23. Śniadeckich 16 - main car park
24. Skawińska 8 - outpatient clinic internal road and driveway for ambulances

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 24 of 30


P-A-09 Disposal of medical, hazardous, other than hazardous and municipal waste

STUDENT'S/TRAINEE'S OBLIGATIONS:

- 1 Segregate waste in accordance with the scheme set out below.
- 2 If in doubt, ask a member of the hospital staff.
- 3 Ask the hospital staff for the detailed waste list included in the *Waste Catalogues*

Waste segregation at the University Hospital in Kraków

BAG						
RED	HARD-WALL CONTAINER	YELLOW	BLUE	GREEN		
MEDICAL WASTE		MEDICAL WASTE	MUNICIPAL WASTE	PAPER	PLASTIC	GLASS
<i>biologically hazardous</i>	<i>biologically and chemically hazardous</i>	<i>chemically hazardous</i>	<i>dry/wet</i>	<i>segregation as specified on the baskets</i>		
<i>examples:</i>	<i>examples:</i>	<i>examples:</i>	<i>examples:</i>	<i>examples:</i>		
<ul style="list-style-type: none"> used individual protection equipment waste from medical diagnosing, treatment and prevention that contain live pathogenic microorganisms or toxins 	<ul style="list-style-type: none"> Waste with sharp ends and edges needles, scalpels, ampoules 	<ul style="list-style-type: none"> Waste from cytostatic and cytotoxic drugs (oncology wards) 	<ul style="list-style-type: none"> Used paper towels Used tea bags Meal Styrofoam packaging 	<ul style="list-style-type: none"> Cardboard, shredded paper (paper) 	<ul style="list-style-type: none"> PET bottles, caps, foil, bags, shopping bags (plastic) Packaging of needs, syringes (plastic) Milk, juice packs (plastic) 	<ul style="list-style-type: none"> Bottles (glass)

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 25 of 30

The basic principles of radiation protection

Definitions and terminology

radiation protection - preventing human exposure and environmental contamination, and in case of an inability to prevent such situations, limiting their consequences to a level as low as is reasonably achievable, taking into account economic, social and health services;

ionizing radiation - radiation consisting of particles directly or indirectly ionizing or both types of those particles or electromagnetic waves 100 nm (nanometres) long, for example X-ray radiation, gamma.

1. **ONLY** hospital staff i.e. technician electroradiologist, radiologist or other approved doctor are authorized to enter the radiology clinic/lab with the equipment emitting ionizing radiation.
2. All radiology clinics/labs discussed above are marked according to the level of exposure:



3. An X-ray lab can be entered only with the clearance of the manager of the clinic/lab and assisted by an employee of the clinic/lab.
4. Special regulations of radiation protection and security are binding in the following labs:
 - interventional radiology
 - nuclear medicine of the Clinical Department of Endocrinology
 - radiotherapy in the Clinical Departments of Ophthalmology and Ocular Oncology as well as Gynaecology and Oncology
 - magnetic resonance imaging.
5. The person in charge of the group is responsible for ensuring that all group members are familiar with the regulations pertaining to radiological protection and security
6. Work in every lab/ clinic /ward, where ionizing radiation is used, is carried out in accordance with the principles of radiation protection and the quality assurance programme, available from the supervising Radiological Protection Inspector.
7. The following rules apply in all units in which ionizing radiation is emitted: *The Manual of work with sources of ionizing radiation and emergency response plan for medical radiation accident.*
8. **ONLY** authorized hospital staff, such as a radiologist or other approved doctor, are authorized to handle equipment emitting ionizing radiation.
9. Students/trainees who need to participate in a medical procedure involving ionizing radiation can do so **ONLY** with the clearance obtained from the Manager of the laboratory/clinic/ward or the person in charge of the group. In such cases students/trainees need to:
 - Find out from the person in charge of the group or the laboratory/department/ward personnel about the course of the procedure and radiation risks.
 - Make sure that they are not pregnant

- Wear protective clothing (protective apron, thyroid shield, etc.) - the decision on the type of protection is made by authorized personnel, particularly by the Radiological Protection Inspector
- maintain a safe distance from the X-ray tube - at least 2 m.
- avoid the primary beam, directed toward the patient.

10. If you have any doubts at all consult the person in charge of the group, Radiological Protection Inspector or an authorized employee of the laboratory/ward.

Remember the three basic principles of radiological protection

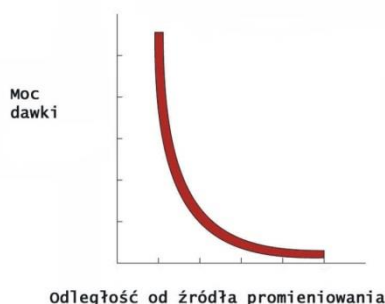
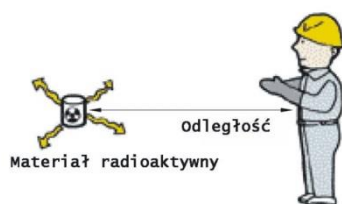
further = safer

shorter = safer

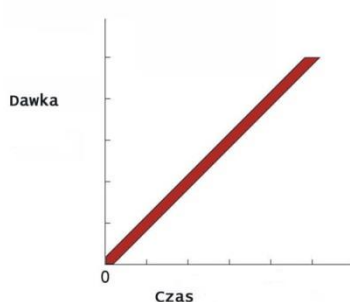
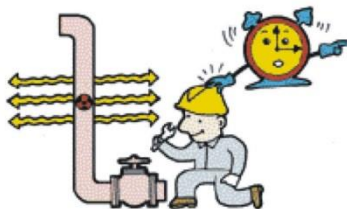
**Use protection/lead
rubber aprons/shields**

Protection =safer


Bezpieczna odległość
Moc dawki jest odwrotnie proporcjonalna do kwadratu odległości



Bezpieczny czas
Dawka = Moc dawki x czas pracy



Źródło	Tłumaczenie
Bezpieczna odległość	Safe distance
Moc dawki jest odwrotnie proporcjonalna do kwadratu odległości	The dose strength is inversely proportional to the square of the distance
Materiał radioaktywny	Radioactive material
Odległość	Distance
Bezpieczny czas	Safe time
Dawka = moc dawki x czas pracy	Dose = dose strength x working time
Moc dawki	Dose strength
Odległość od źródła promieniowania	Distance from the radiation source
Dawka	Dose
Czas	Time

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 27 of 30

P-A-12 Principles of personal data protection at the Hospital (extract from the Personal Data Security Policy procedure)

1. General principles:

Pursuant to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (“**GDPR**”):

1.1. “Personal data” means any information relating to an identified or identifiable natural person (“data subject”);


an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person;

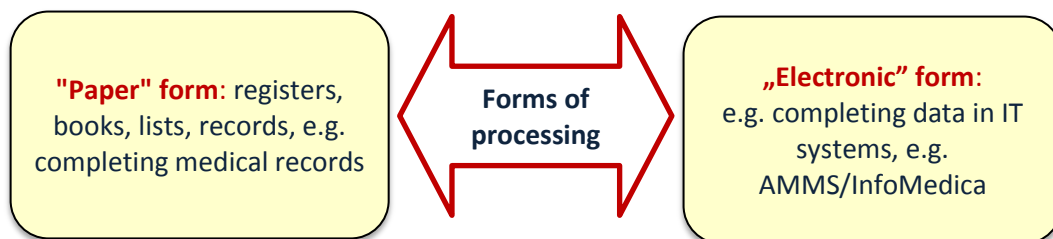
Personal data is divided into the so-called ordinary data, special categories of personal data (Article 9 of the GDPR) and data relating to criminal convictions and offences (Article 10 of the GDPR)

Ordinary data	Special categories of data	Article 10
<ul style="list-style-type: none"> • first name • last name • residence address • PESEL (Polish Resident Identification No.) • NIP (Tax Identification No.) • number and series of identity card • education • occupation • gender • telephone number 	<ul style="list-style-type: none"> • racial or ethnic origin, • political opinions, • religious or philosophical beliefs, • trade union membership • genetic data • biometric data • data concerning health • data concerning sex life or sexual orientation 	<ul style="list-style-type: none"> • data concerning criminal convictions and offences

Data on the health status of the Hospital's patients, contained in the medical records, constitutes sensitive data and is subject to special legal protection.

1.2. “Processing” means any operation or set of operations which is performed on personal data or on sets of personal data, whether or not by automated means, such as collection, recording, organisation, structuring, storage, adaptation or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 28 of 30



1.3. Compliance with the principles of personal data protection at the Hospital is supervised by the Data Protection Officer, appointed by the Director of the Hospital. In case of doubt as to the procedure applicable in specific situations, you may contact the Information Security Administrator by e-mail: dane.osobowe@su.krakow.pl or by phone at the internal telephone number 71 17.

2. Obligations of the student/trainee.

Students/trainees are obliged to comply with the laws, internal regulations, as well as Ordinances and Announcements issued by the Director of the Hospital relating to the protection of the personal data of patients, including the data contained in the medical records.


2.1. Students/apprentices are required, in particular, to:

2.1.1. Familiarise themselves with:

- 2.1.1.1.** the generally applicable provisions of law related to the protection of personal data, including in particular Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), and the Personal Data Protection Act of 10 May 2018
- 2.1.1.2.** the internal regulations of the Hospital, including in particular Procedure **P-A-12** *Personal Data Security Policy*, Instruction **I-A-02** *Instruction for managing the IT system for processing personal data* and Procedure **P-A-32** *Information Security Policy at the University Hospital in Kraków* and Instruction **I-A-05** *Confidentiality of the personal data of patients of the University Hospital in Kraków*.

2.1.2. Comply with the principles of personal data protection in force at the Hospital, in particular those arising out of the provisions of law and internal regulations specified in Section 2.1.1, including:

- 1) to exercise due diligence in order to protect personal data;
- 2) to ensure the security of processing of personal data, in particular through its protection against unauthorized access, unjustified modification or destruction, illegal disclosure or acquisition, including the use of the required technical and organizational measures ensuring the protection of personal data;
- 3) to maintain the secrecy of personal data obtained in relation to participation in classes at the Hospital and the means of protecting such data. The obligation of secrecy is applicable throughout the classes and after their termination. The obligation of secrecy related to patient data is applicable also after the death of a given patient;
- 4) to prevent attempts to violate the security of personal data and to report violations or suspected violations of the principles of data protection.

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 29 of 30

2.2. Personal data breach:


2.2.1. “Personal data breach” means a breach of security leading to the accidental or unlawful destruction, loss, alteration, unauthorised disclosure of, or access to, personal data transmitted, stored or otherwise processed.

2.2.2. In the event of a breach (or a reasonable suspicion of a breach) of the principles of personal data protection, you are obliged to:

- report the breach (or the suspected breach) to the Data Protection Officer without undue delay, along with its description:
- in writing – the security breach report form constitutes an appendix to Procedure P-A-12 Personal Data Security Policy,
- by e-mail – to the address: dane.osobowe@su.krakow.pl
- through Helpdesk
- in person or by telephone – extension 71 17;
- refrain from any actions that could hinder the determination of the circumstances of the breach;
- cooperate with the DPO in order to clarify all circumstances of the personal data breach.

2.3. Selected principles of personal data protection in force at the Hospital:

Access to medical records by unauthorized persons	Persons who are not authorized under the applicable regulations are prohibited from accessing the medical records of the Hospital's patients.
Illegal sharing of medical records	It is prohibited to share medical records and patient information (personal data of patients) with unauthorized persons and entities, in violation of the Act on Patient Rights and the Patient Rights Ombudsman and the Instruction concerning the sharing of medical records with third parties (Instruction I-A-01).
Granting access to medical documentation for educational purposes	<p>Medical documentation of the providers of medical services that participate in preparing individuals for practising medical professions and educating individuals who practise medical professions is shared with those individuals <u>only to the extent necessary to fulfil the educational objectives.</u></p> <p>The said individuals are obliged to maintain the secrecy of the information included in medical documentation, also after the death of a given patient.</p>
Sharing of medical records for scientific purposes	<p>Medical records are shared with universities or research institutes for scientific purposes following the approval of the Director of the Hospital.</p> <p>The documentation should be made available without the disclosure of surnames and other data allowing for the identification of the person to whom it relates.</p>
Protecting documents from other patients and third parties	<p>Documents containing personal data of patients should be protected in a way which prevents unauthorized persons from accessing the data, especially in places which can be freely accessed by third parties (e.g. registration desk, lounge).</p> <p>Students may access the rooms in which personal data is stored only if they are accompanied by the Hospital Staff.</p>

 Szpital Uniwersytecki w Krakowie	TRAINING FOR STUDENTS/TRAINEES On the prevention of HAI, H&S, radiological, environmental protection and principles of personal data protection	3 rd edition dated 20.09.2018 r.
		Page: 30 of 30

Destroying unnecessary documents containing the personal data of patients	<p>It is prohibited to throw out medical records to the trash in a way which allows for the identification of patients, place of their preparation etc.</p> <p>All unnecessary documents (printouts, copies, drafts, etc.) must be immediately destroyed in shredders in a way which prevents unauthorized persons from reading them.</p>
Securing medical records	<p>A student/trainee who finds unsecured medical records in the Hospital, as well as their copies, printouts, etc., is obliged to:</p> <ul style="list-style-type: none"> • secure them (to ensure that the information contained in the records is not disclosed to unauthorized persons), and • to report this fact to the group supervisor.
Work in the IT system	<p>It is prohibited to share IDs and passwords to the computer system with other persons, including other employees.</p> <p>It is prohibited to use the IT system without the appropriate authorizations.</p>
Clean Desk Policy	<p>It is prohibited to leave documents containing the personal data of patients in public access areas and unprotected areas.</p> <p>Documents that are not used, should be kept in filing cabinets, drawers, desks, etc.</p>
Locking rooms	<p>When leaving the work place, please make sure that the room is closed, if you are the last person leaving the room.</p> <p>Room keys are protected against access of unauthorised parties, and they are made available to the authorised employees in accordance with Procedure P-A-BPC-08 Principles of key management at the University Hospital in Kraków.</p> <p>The manner of securing keys to safes, cabinets and other office furniture is specified by the managers of the basic organisational units of the Hospital.</p>
Saving data on private media carriers	<p>It is prohibited to store personal data of patients on private media carriers (e.g. USB sticks, CD's, external hard drives).</p>
Maintaining confidentiality	<p>The student/trainee is obliged to maintain the confidentiality of the personal data obtained in connection with participation in the classes at the Hospital.</p>
Identification badges	<p>Students/trainees, are obliged to wear clearly visible identification badges, containing at least the full name and surname, the name of the University and the field of study.</p>
Liability for violation of the security of personal data	<p>Persons who violate the principles of personal data security, including students/trainees, may be subject to criminal penalties under the Personal Data Protection Act.</p> <p>Persons who are not the employees of the Hospital, including students/trainees are liable for damages towards the Hospital on the principles set out in the Civil Code.</p>