



UNICAMILLUS

# Regulations for the delivery and use of dosimeters for students at risk of radiation exposure

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## **Art.1 Introduction: Internship for students at risk of ionizing radiation exposure and personal dosimeter**

BSc Radiology, Diagnostic Imaging and Radiotherapy Techniques students who have met the requirements for participation in the internship programme at one of the healthcare facilities in partnership with UniCamillus, are subject to the risk of ionizing radiation exposure. The internship will start only after students are considered able to work following a medical examination and after having collected their personal dosimeter at the dedicated facility at UniCamillus.

The use of a personal dosimeter is mandatory for all healthcare workers exposed to ionizing radiation, in compliance with art.133 of Legislative Decree no. 101/2020.

Students must comply with the regulations in force concerning radiation protection in internship and working facilities and all those areas listed in Legislative Decree no.101/20, Art. 109, paragraph 9, letter c). Students must also comply with any other guidelines given by the experts on radiation protection on duty at the healthcare facility during their internship.

## **Art.2 Assessment of individual radiation dose**

Your personal dosimeter is a fundamental tool for the assessment of the individual radiation dose received by healthcare workers at risk of radiation exposure.

Assessment of the individual radiation dose received must be carried out by means of the dosimeter every 60 (sixty) days.

By personal dosimeter is meant any tool given to healthcare workers which is able to measure the dose of radiation received. Personal dosimeters are not transferable and students must handle them with care.

## **Art.3 How to collect your dosimeter**

Before the start of the internship programme, every student will receive their first dosimeter. Students will then have to replace their dosimeter with a new one every two months by going to the University's UniLabs building, after giving notice to front desk staff and waiting for a tutor in charge.

Dosimeters can be collected on **the last Tuesday and Thursday of their month of expiry, from 10am to 1pm and from 2pm to 4.30pm.**

In order to replace and collect a new dosimeter, students will have to show their personal university ID card.

Handing in of dosimeters must take place by the last day of their month of expiry, as indicated on each dosimeter.

If students fail multiple times to return the device by the time and date indicated, the University may discontinue the internship programme or take other measures.

The returning of dosimeters and their replacement will be deemed valid only with provision of the student's signature on completion of each procedure.

## **Art.4 Warning and precautions about use of dosimeters**

The date of replacement of the dosimeter is indicated on the device. The dosimeter must not be used after the indicated date or the student will be excluded from the internship programme for

the following two terms. The dosimeter must be placed on your chest, according to the instructions given to you by your radiation protection expert. Each student is directly responsible for the handling of their dosimeter and for its misuse.

Users of dosimeters must act in accordance with the following guidelines:

- Do not deliberately expose the device to sources of ionizing radiation.
- Store the device safely and keep it away from liquids or heat sources.
- Do not lend or give the device to other people and do not use it outside of the healthcare facility where you are doing the internship.
- Keep the device on you at all times in areas where ionizing radiation is present and handle it carefully.
- The device must be worn in your apron pocket or on your waist in areas where ionizing radiation is present. Do not cover the device with other materials.
- Do not leave your dosimeter unattended, not even temporarily, on work-tables, or exchange it with other people or use it for unintended purposes.
- At the end of the internship programme the device must be stored away from ionizing radiation.
- If you are given a dosimeter bracelet, you must wear it on the most exposed limb. If you are given a crystal dosimeter, you must wear it on the lowest part of your forehead.
- While wearing an X-ray protection apron, put the dosimeter on your chest under the apron.
- Immediately report to your radiation protection expert if the device is deteriorated or lost, so it can be replaced.
- Do not expose the device while handling open sources of radioactive material.
- Do not tamper with the device (do not open or unscrew it, etc.): tampering with the device may alter or destroy the information collected by it and make the device inoperable.

#### **Art.5 Interns' obligations (art.118 of Legislative Decree no.101/2020)**

The obligations that have to be met by students during their internship programme at healthcare facilities partnered with UniCamillus are the same as those that healthcare workers have to comply with, as stated in art.118 of Legislative Decree no.101/2020:

##### *5.1 Healthcare workers must:*

1. Follow the rules set by their employer or any other person in charge, in order to guarantee the individual and collective protection and the safety of the procedures applied.
2. Use PPE and dosimeters supplied by their employer as per instructions.
3. Immediately notify their employer or any other person in charge of lack of safety or PPE or dosimeters, including if dangerous situations arise.
4. Never remove or tamper with devices or any other PPE or measurement systems.
5. Never act without supervision in a way that may compromise safety or protection.

6. Undergo medical examination, in compliance with art.134 of Legislative Decree no.101/2020.

7. Healthcare workers working in more than one job which could put them at risk of ionizing radiation exposure must notify each employer of every activity carried out in their other jobs, in compliance with art.116 of Legislative Decree no.101/2020. The same procedure applies to previous jobs under the same conditions.

### *5.2 Special provisions for female healthcare workers*

Notwithstanding the application of the laws in force concerning the protection of working mothers as stated in Legislation Decree no.151 of 26 March 2001, because of ionizing radiation exposure, the following rules also apply:

- Healthcare workers must notify their employer of their pregnancy as soon as it is confirmed.
- Pregnant women cannot work in ionizing radiation in specific areas that may expose their baby to a dose superior to one millisievert.
- Breastfeeding healthcare workers should not take part in activities involving a risk of contamination.

## **Art.6 Loss or damage of dosimeters**

If a dosimeter is lost or damaged, students must give notice to the Dosimetry Office ([dosimetry@unicamillus.org](mailto:dosimetry@unicamillus.org)) as well as the Teaching Services Office by filling in the form "*Lost or damaged dosimeter*".

While waiting for a new dosimeter, students are not allowed in the radiation controlled area.

Students will be provided with a new dosimeter only after payment of a €20.00 fine, which corresponds to the amount of money paid for by the University to buy a new dosimeter.

Payment can be made at the University's Administration Office or through PayPal to the email address [administration@unicamillus.org](mailto:administration@unicamillus.org) stating the reason as *New Dosimeter* followed by NAME, SURNAME and STUDENT ID NUMBER.

When collecting the new dosimeter students must present a receipt of payment.

If the dosimeter is not returned within the deadlines given, the University may apply measures against the student.

## **Art.7 Failure to return personal dosimeter**

Failure to return the dosimeters on the dates specified in Article 3 (the last Tuesday and Thursday of their month of expiry) will be considered equivalent to the loss of the device.

Students who do not comply with the return procedure within the specified time frame and manner will be required to fill in the Lost or Damaged Dosimeter form and pay a €20.00 fine which corresponds to the amount of money paid for by the University to buy a new dosimeter (Article 6).

Students who are unable to return their dosimeter on the specified dates should contact the Dosimetry Office to arrange an alternative date, which must be within 15 days from the device's expiration date.

#### **Art.8 End or cessation of internship**

Once the internship programme has ended and all ECTS credits have been obtained, or in case of transfer, drop-out or other reason concerning a cessation of the internship, all dosimeters must be returned to the dedicated office as indicated in art.3.