

Dosimetry Badge Frequently Asked Questions



Environmental Health and Safety (EH&S)
Columbia University
badges@Columbia.edu

Frequently Asked Questions

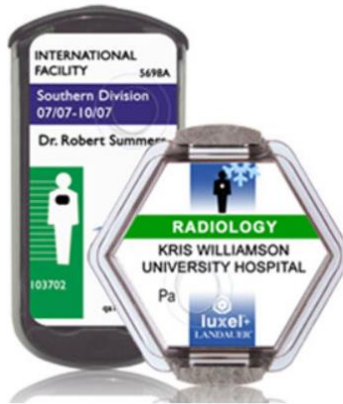
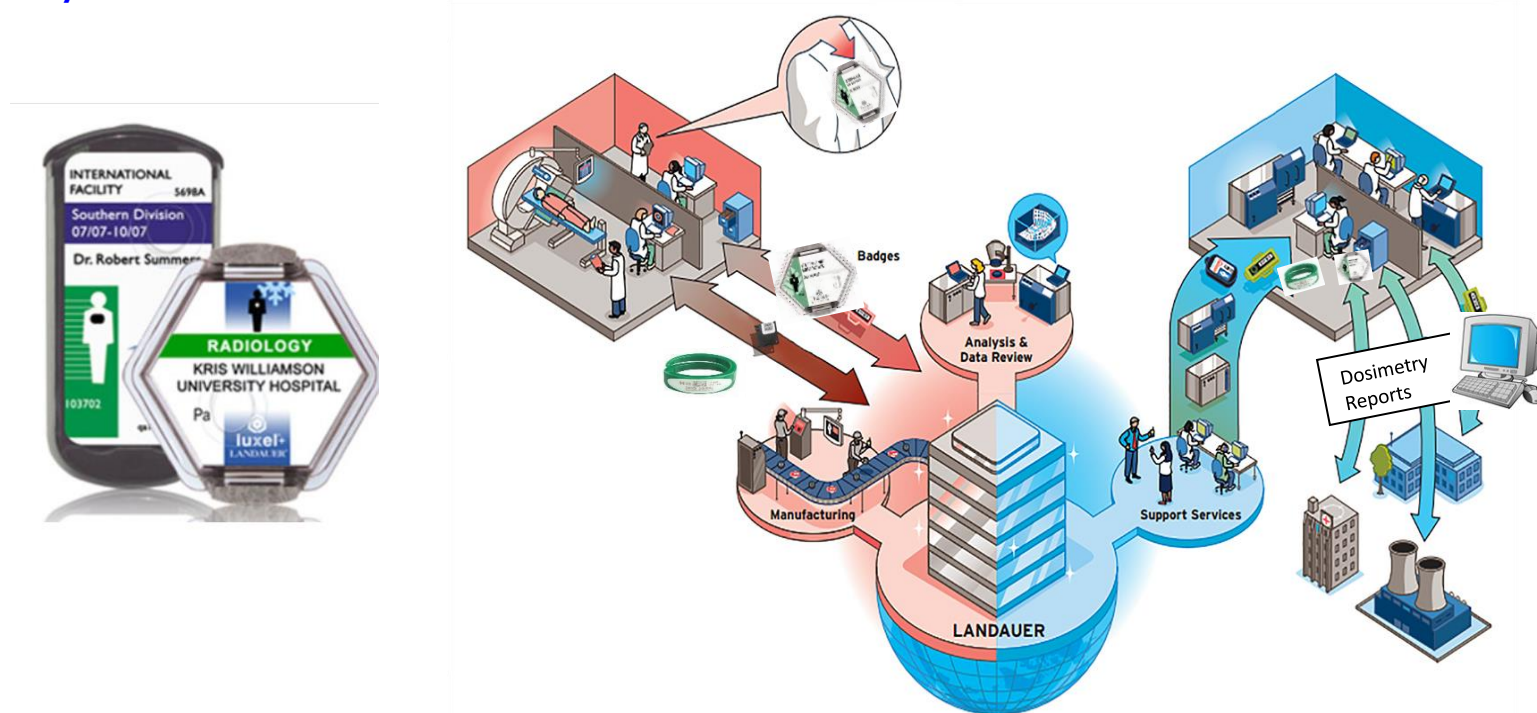
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- Where do dosimeters come from?
- What does “badge account” mean? How many badge accounts are there?
- How can a new dosimeter user get their dosimeters?
- How can dosimeter users review their individual dosimetry records?
- I am pregnant and I work with radiation. What additional precautions do I need to take? Are there additional radiation dosimetry monitoring that could be set up for me?
- What is ALARA?
- What is a control dosimeter? How do I use it?
- Can I wear/assign someone else’s dosimetry badge?
- A person in my group lost or damaged their dosimeters. What do I do?
- What is form 5?

Where Do Dosimeter Badges Come From?



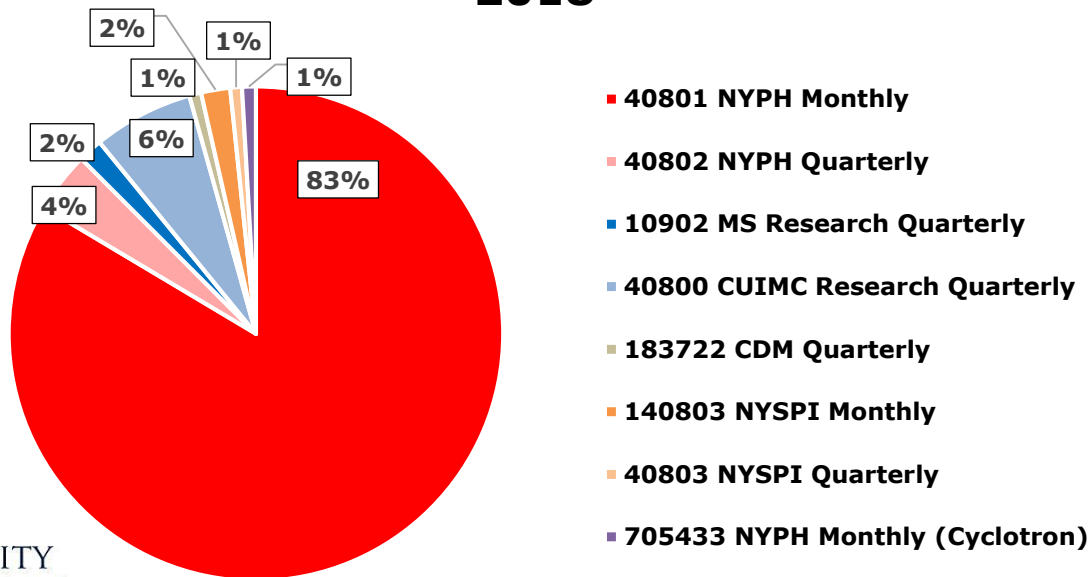
- LANDAUER provides Columbia University's dosimeter badges, process dosimeter readings and provide dosimetry reports online at www.myLDR.com



Dosimeter Badge Accounts

- A dosimeter badge account for a group is a collection of information of radiation dosimeter users in a group, including the group's dosimetry liaison, types of dosimeters used, individual user names and radiation exposure history
- During 2018, over 44,632 dosimeter badges (personnel, spares, area monitors) were administered to 188 badge liaison for group accounts across all campuses

Distribution of Dosimeter Badge Accounts in 2018



How to Get a New Dosimeter Badge

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- New dosimeter user must attend an in-person radiation safety training prior to obtaining a dosimeter by emailing badges@columbia.edu



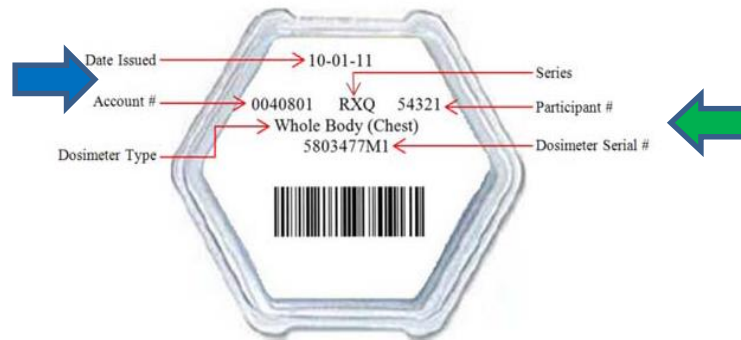
How to Review Individual Dosimetry Records



- Go to <https://www.myLDR.com> and log in with
Username: idrcolu / Password: CUdoseIDR247
- Follow the instructions (enter your account number and serial number)
- **Look on the back of your badge – unclip from holder**

Account - #####

Serial - #####XX



Declared Pregnant Workers Program

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- Columbia University provides a voluntary and confidential program for pregnant radiation workers
- Radiation Safety provides counseling and education to the declared pregnant radiation worker with regard to the risks of radiation exposure and to provide recommendations for maintaining the radiation dose to the embryo/fetus within limits
- If monthly fetal dosimeters are issued, they will be included in group monthly dosimetry distribution and return or distributed to the worker separately if group receive quarterly dosimeters

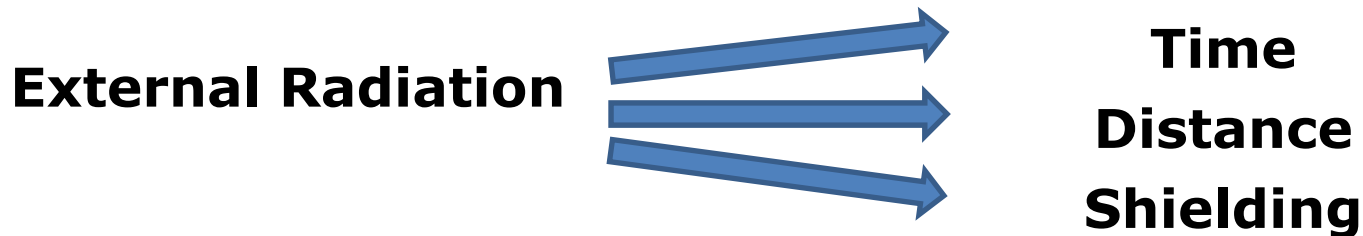


What is ALARA?

Keep radiation exposure

As Low As Reasonably Achievable

ALARA principles



What is ALARA? (Continued)

➤ CUIMC/NYP has established the following monthly ALARA alert levels to provide guidance to dosimeter users before workers' radiation dose reaches annual limit

Exposure Type	ALARA Level I (mrem)	ALARA Level II (mrem)	Annual Regulatory Limit (mrem)
<ul style="list-style-type: none">• Whole body Deep (DDE)• Assigned Effective Dose Equivalent (EDE)	100 or 1,250 annual cumulative	400 or 2500 annual cumulative	5,000
Lens of Eye	375 or 3,750 annual cumulative	750 or 7,500 annual cumulative	15,000
Skin and Extremities (SDE)	1,875 or 12,500 annual cumulative	5,625 or 25,500 annual cumulative	50,000
Organ	1,875 or 12,500 annual cumulative	5,625 or 25,000 annual cumulative	50,000

What is ALARA? (Continued)

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- Individuals whose dosimetry readings exceeded ALARA I levels will receive a notification email from Radiation Safety to review work practices.
- Individuals whose dosimetry readings exceeded ALARA II levels will receive a notification email from Radiation Safety, as well as an investigation via phone or in-person by Radiation Safety to review cause of exposure and work practices.
- Individuals whose dosimetry readings exceeded annual radiation dose limits will receive a notification email from Radiation Safety, as well as an investigation via phone or in-person by Radiation Safety to review cause of exposure and work practices. If the radiation exposure is verified to be real, the individual's work with radiation will be suspended until the next calendar year.

What is a Control Dosimeter and How to Use It?

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➤ **What is and how do I use a control dosimeter?**

The control badge travels with the other badges to measure the radiation that the badges were exposed to in transit to you, along with the ambient radiation due to naturally occurring sources. You receive a new control badge with each regular dosimetry shipment. Proper use of the Control Badge will increase the accuracy of the results. It is very important that you return the Control Badge every wear period.

➤ **I have a new employee, or have lost a badge, can I give them the control badge?**

No, if you use this badge for someone else it will invalidate the readings.



Lost or Damaged Badges

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➤ **Can I wear/assign someone else's dosimetry badge?**

No. Do not wear or assign someone else's badge or loan the badge to another person. It is a legal requirement that doses be tracked for the worker to whom the dosimeter is assigned.

➤ **What to do if I lose a badge?**

If you lose or damage the badge, report it promptly to Radiation Safety Office at 212 305 5359 or email badges@columbia.edu

Occupational Dose Records - Form 5

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➤ **What is Form 5?**

Form 5 is the annual report of individual's accumulated radiation dose as measured by individual's issued radiation monitoring badge for calendar year

This report is furnished to you under the provisions of New York City Department of Health Code Article 175.11(d) and/or Nuclear Regulatory Commission regulation 10 CFR Part 19.

➤ **Where can I get Form 5?**

This required annual report, you may request your complete dose record to date at any time by contacting the radiation safety office, or on-line through myldr.com.

➤ **What to do with from 5?**

Please distribute these reports to the individuals in your group.

Contact Information

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