

Proper way of Using TLDs in Diagnostic Radiology

The mission of AERB is to ensure that the use of ionizing radiation and nuclear energy in India does not cause undue risk to health of people and the environment.



Issued by : **Atomic Energy Regulatory Board**

Niyamak Bhavan, Anushaktinagar, Mumbai - 400094. (Maharashtra)



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Use TLDs - Why?

What is TLD Badge



TLD Badge is a radiation dose measuring device. This enables us to know whether we are working within the safe dose limits prescribed by AERB.

Dose limits of Occupational Exposure (AERB Directive)

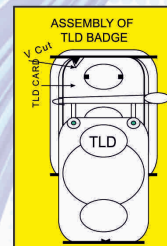
Effective Dose 20 mSv in a year averaged over a period of 5 years

Annual equivalent dose in the

Lens of the eye	150 mSv
Skin	500 mSv
Hands and feet	500 mSv



Use TLD with cassette!



Loading TLD card in the cassette



TLD with cassette



TLD without cassette

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Wear TLDs below Lead Apron!



TLD below apron



TLD above apron

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Store TLD - Where?

Personnel TLD is to be properly stored when not working with radiation



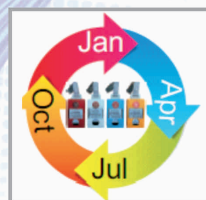
Never store/ leave TLD badges inside X-ray Room/Radiation Area.



- Store control TLD badge in radiation free area all the time.
- Store personnel TLD badge in radiation free area when not in use, along with control TLD badge. (e.g., office room)



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Change your TLD cards every monitoring period (eg. Quarterly) and return used TLD cards to Laboratory for dose assessment.

If TLD fell/left in X-Ray room, and got accidentally exposed, report immediately to the lab and send it for processing.

Any suspected excessive exposure to personnel should immediately be reported to AERB



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List of Laboratories Accredited to provide TLD services

Name of Accredited Laboratory	State
Avantec Lab. Private Limited 31, Kamraj Street, Srinivasa Nagar, Padi, Chennai, Tamil Nadu Pin- 600050 Tel.: 044-26345288 044-26630553/54/56	Andhra Pradesh, Telangana, Tamil Nadu, Karnataka, Kerala, Puducherry, Andaman and Nicobar and Lakshdeep (Southern Region)
Renentech Lab. Private Limited C-106, Synthofine Industrial Estate, Off Aarey Road, Goregaon (E), Mumbai, Maharashtra Pin- 490063 Tel.: 022-40037476	Maharashtra, Gujarat, Rajasthan, Goa, Dadra and Nagar Haveli and Diu (Western Region)
Ultratech Lab. Private Limited Cloth Market, G.E. Road, Kumbhari, Bhilai, Durg, Chhattisgarh Pin- 490042 Tel.: 0788-3295166, 09981212431	All other states in the Central, Northern and North Eastern parts of the country
Defence Laboratory, Jodhpur	All Defence institutions of country

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Radiation Generating Equipment

Radiation Symbols



Radioactive Source

FOR DETAILS CONTACT :

The Head,
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Applications to AERB can now be submitted online through <http://www.aerb.gov.in/AERBPortal/eLORA.htm>

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