

Attention Clinical Students: Essential Personal Monitoring Device (PMD) safety and storage

Wearing a PMD, sometimes called a dosimeter, correctly – and every time – is a vital part of working with ionising radiation. Regular exposure to ionising radiation can be hazardous without proper dose tracking and monitoring. Therefore, medical radiation device operators need to be proactive and diligent about wearing their PMD correctly.

As you continue your practical training, monitoring your occupational radiation exposure is a top priority. Your PMDs are highly sensitive equipment. While they are designed to accurately track your radiation dose, this sensitivity means they can register additional readings if subjected to unsuitable conditions. Some examples of unsuitable conditions include airport security scanners, extreme environments (hot cars and/or clothes dryers) and storage near radiation sources.

General Storage & Safety

When not in use, your PMD must be stored properly to prevent false readings.

- **If possible, leave it at the designed place:** Always store your PMD in a designated place as advised by your academic or placement provider. This could be at home or on the designated PMD board at the facility. Do not leave your PMD in the car.
- **Environmental hazards:** Keep PMDs away from radiation sources, extreme heat, direct sunlight, and moisture. Never leave them in the X-Ray room, in your car, in the laundry, or on a windowsill.
- **ALARA Principles (As Low As Reasonably Achievable):** Always maximise **Distance**, use **Shielding**, and minimise **Time** around radiation sources.

Travelling Through Airports

If you are moving between clinical placements and must travel by air with your PMD, extra precautions are mandatory. **Airport X-ray scanners will expose your PMD to radiation, resulting in a false-high occupational dose.**



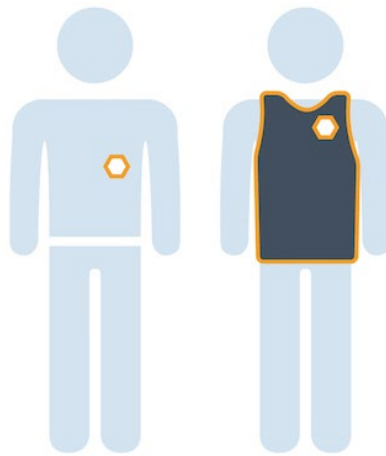
Personal Safety

PMDs are typically used, and may be required, in occupational settings where workers are likely to be exposed to ionising radiation. Wearing them correctly will result in the accurate measurement of radiation dose. This information is crucial for personal safety, as it allows individuals to modify their workplace practices to reduce radiation dose. For those managing personnel safety, it allows them to modify policies and procedures to affect those similarly exposed. Inadequate protection measures or unnecessary concerns can result if dosimeters are not worn correctly.

Chest PMD

This is the most common wear location for a PMD.

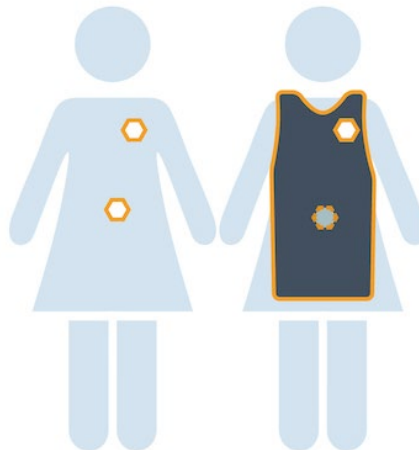
- Without apron: midway on the torso between shoulders and waist on either side of the chest
- With apron: outside the lead apron at shoulder level on either side of the chest



Foetal PMD

If you are pregnant, you should wear your regular chest or collar PMD as normal PLUS a foetal PMD. Contact the radiation monitoring team (radmon@csu.edu.au) to organise a foetal monitor and alert your subject coordinator. It is important to note that, even though the chest PMD is exchanged in the usual changeover, the foetal PMD must be exchanged monthly.

- Without apron: foetal: centered at waist level
- With apron: foetal: centered on the waist, under the apron



Please protect the PMD so it can accurately monitor your radiation doses! If you suspect your badge has been compromised, please notify Charles Sturt University radiation monitoring team (radmon@csu.edu.au) and await further instructions.