

Personal Radiation Detectors (RadEye GF)

202.1 PERSONAL RADIATION DETECTORS (RADEYE GF) - STANDARD OPERATING PROCEDURES

The goal of the University of Maryland, Baltimore Police Department (UMBPD) response to incidents involving radioactive material sources in security zones to help assure that radioactive materials in these zones do not constitute a public safety hazard either through criminal or non-criminal means.

In order to achieve this goal, we will respond in a manner to guard public safety based on the specifics of the incident and to stop any attempt to remove or sabotage radioactive materials while applying tactics that contribute to officer safety during the response.

The UMBPD is equipped with the RadEye GF Gamma Survey Meter. These devices are commonly referred to as Personal Radiation Detectors (PRD). The RadEye GF is a lightweight and very rugged instrument designed for quick and reliable measurement of gamma dose rates.

These PRDs are calibrated to detect the type of radiation coming from our medical and research instruments of concern. The dosimeters have two go/no-go alarms. Each alarm has a unique sound and vibration. One alarm will be set for the strength or intensity of radiation and the other for total dose of radiation. Each alarm is set to warn you that you should spend minimal time in the area. The alarms are set to warn you that the radiation source is unshielded.

The PRDs, when not in use, will be stored in Room 208 of the Public Safety Annex. A PRD will always be deployed in each UMB Police vehicle.

- (a) At the beginning of the shift, while conducting a vehicle inspection, members will turn on the PRD, check the battery power to ensure it is operable, and then turn the PRD off.
- (b) The member will note this activity on their run sheet and report any abnormalities.
- (c) The PRD will remain accessible in case the member responds to a radiation related call.
- (d) If the batteries are dead, notify Quartermaster to have the batteries replaced.

When a member responds to a radiation related call, the member will turn on the PRD and keep it on their person until the call is completed.

The PRDs will automatically save registered dose rates and doses over the real time monitored periods. The data can later be downloaded and analyzed for additional information to be used for the ongoing investigation and to obtain medical treatment, if needed.

The Education & Training Lieutenant will ensure, through coordination with EHS, that the PRDs are calibrated annually.