



## CONTAMINATION CONTROL IN HEALTH SECTOR

Bertin Instruments, Montigny le Bretonneux, France

### / CONTEXT

Numerous pharmaceutical industries, health and research facilities use radioactive sources on a daily basis for treatment or as radioactive tracer.

Therefore, the staff are inevitably exposed to a risk of contamination which needs to be controlled.

The workers involved are various: radiopharmacists, radiographer and everyone in contact with exposed individual and surfaces.

Various types of contamination may occur: internal contamination (inhalation, ingestion, injuries) or external contamination through direct contact with radioactive sources.

### / CONTAMINATION CONTROL

In order, to reduce the general risk of contamination and to improve the safety of staff and patients, Bertin has developed a radioactive contamination control system which detects alpha, beta and gamma radiation: the SaphyRAD.

This new contamination meter is equipped with a visual alarm, a proximity sensor along with a full range of probes which allows it to adapt to all surfaces (31 cm<sup>2</sup> or 100/170 cm<sup>2</sup>) and to detect all types of radioactivity (total count  $\alpha\beta\gamma$  or separated count  $\alpha$  and  $\beta\gamma$ ) by direct control or smear sample.



31 cm<sup>2</sup> probe



100 and 170 cm<sup>2</sup> probes

A **radioelement library** is integrated into the SaphyRAD, up to 30 customizable nuclides : for example, the user selects the element to be measured (<sup>125</sup>I, <sup>99m</sup>Tc etc.), carries out a radioactive package control and can compare his measurement to regulatory threshold value.



Floor stand



Package control

A **floor stand** is also available and allows a quick and effective hand-foot check.

**Robust** and **ergonomic**, the SaphyRAD is adapted to the use by non-specialist.

### / CONCLUSION

SaphyRAD is a multi-probes, handheld contamination meter designed to control the alpha, beta, gamma radioactive contamination in both medical field and sectors related to the use of radioactivity.

Intuitive and ergonomic, it can be handled. by non-specialist operators for a simple and efficient control.