Round table

Lessons learned to optimize occupational radiation protection

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To be or not to be aware of the own occupational exposures?

- Theoretically: everybody
- Practically: some people
How should awareness be improved?

- Occupational exposures
- Underlying causes of exposures and how to control

RP Service → Department Director → Worker

Department occupational exposure
# Dose reference levels for groups

People beyond the reference Hp(10) level

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<thead>
<tr>
<th>Group</th>
<th>Reference Dose</th>
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<tr>
<td>PET Lab</td>
<td>0.40</td>
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Why these values?
## Dose reference levels for groups

People beyond the reference Hp(10) level

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**Investigate:**  High value  
Exceeding frequently
Reasons for individual dose elevation

- Contamination
- Workload increased
- Activity carefully loaded in a syringe
- Intervention in a synthesis module
- Cyclotron maintenance/intervention
- Setting up a new radiopharmaceutical

Were they aware of the risk?
Activities that need attention
- potential high dose
- doses are not well known

• Cyclotron intervention
• PET Radiopharmaceutical production

• Radiomethabolic treatments: new or not very frequent
Our experience with the ORAMED project

• Good practice
  – technicians /nurses rotation
  – Massive shielding

• Maximum/measured dose $\approx 3$
How to improve RP?

• Training

• Standardization of minor procedures

• Active dose meters in PET
  – Dose vs Dose rate + Alarm
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