HUMAN IMAGING FOR NON-MEDICAL PURPOSES

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Legal framework

- Law on Radiation Protection
- Description of Procedures for Performing Non-Medical Exposure Procedures (approved by the Minister of Health, 2012)
Law on Radiation Protection

**Non-medical exposure** - exposure not attributable to medical exposure and incurred while seeking to obtain information for the purposes other than disease diagnostics and/or improvement of treatment and health condition.
4. Scanning equipment with sources of ionising radiation intended for detecting items concealed in or on human body may be used in the Republic of Lithuania only when the Government passes a resolution on use of such equipment.

5. A member of the public may refuse the procedures involving medical or non-medical exposure, except in circumstances established by law where such refusal is not allowed.
Non-Medical Exposure Procedures

Take place in a medical facility
Using medical radiological equipment
Performed by radiology personnel
With the image reported by a radiologist/doctor for

- Health assessment for employment purposes
- Health assessment for immigration purposes
- Health assessment for insurance purposes
- Health assessment for other purposes not intended to benefit the health and well-being of the exposed individual
- Age determination
- Assessing physiological suitability/status
- Identification of concealed objects within the human body
Non-Medical Exposure Procedures

Take place in a non-medical facility (often in a public place)
Using specialized inspection imaging equipment
Performed by non-radiology personnel
With the image viewed by a non-medical person

for

– detection of concealed objects on or attached to the human body:
  • Airline passengers; persons crossing a national border;
– detection of concealed humans as part of cargo screening
Requirements for Non-Medical Procedures in Medical Facilities

- Practitioner is responsible for justification
- Individual shall be informed
- Written acceptance of procedure
- Possibility to reject the procedure, except when court states otherwise
- Registration
- Dose constraint 0.3mSv
- RPC permission - if dose constraint is exceeded
- Prohibited to use photofluorography or fluoroscopy units without image intensifiers
Scanning of Individual

- Essential to warn before scanning
- Individual has an option to refuse
- Possibility to use alternative search methods
- Prohibited scanning on massive scale, except on cases, stated by the Government
- Prohibited scanning of pregnant woman and children under 16
- Dose contrain 0.25 mSv and 0.4 µSv during one scan
- Equipment has to follow IEC standard and be marked with CE
- Radiation registration device or special methods for the assessment of effective dose
Scanning of Individual

- Non-medical procedure, when searching for drugs, should be done in medical facility.
- Personnel screening by detection of transmitted X-rays is prohibited. Only backscattered technology shall be used.
Detection of concealed individual as part of cargo screening

- Guaranteed radiation safety of people involved in the procedure
- Probable exposed individual’s dose constraint 0,01 mSv during one scan
- Prepared procedures to estimate the dose of exposed individual
- Before starting the scan, make sure people fully understand your actions
- Deliver information to RPC
Questions?
Thank you