

Security of radioactive sources in the UMC Utrecht

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- UMC Utrecht
- Enhancing security
 - *Sources*
 - *Critical processes*
 - *Threats*
 - *Security*
 - *Vulnerability*
 - *Improvements*

- 1 042 clinical beds
- 31 000 admissions
- 23 000 surgical interventions
- 130 000 first visits
- 11 000 employees
- 3 500 students



Every year

- 200 notifications of theft/ loss
- 6700 doors not locked properly
- 90 persons behaving suspiciously
- 30 denials of admittance



Security project



Universitair Medisch Centrum
Utrecht

- Sources
- Critical processes
- Security elements in place
- Threats
- Vulnerability
- Improvements
 - Cost-effectiveness



- High risk
- Intermediate risk
 - (Blood) irradiators
 - Therapeutic radiopharmaceuticals
- Low risk
 - Radioactive stock
 - Reference sources
 - Brachytherapy



Critical processes



Process	Risk level
Purchase	Intermediate
Storage/ Receipts	High
Handling	Low
Local storage	Low
Usage	Low-intermediate
Waste	Low-intermediate



Threats



- Fraud, including theft of goods by employees
- Theft during transport or receipts
- Theft of information
- Bribes/ extortion/ blackmail
- Entering by force





Security elements in place

- Certificates of good Conduct for employees and third parties
- Identification card for employees and students
- Entrance via card readers
- (Digital) locks
- Camera surveillance
- Security department



Vulnerability



- Detection of breaches
- Response time
- Knowledge
- Awareness
- Compliance
 - Behaviour



Physical security measures

- ID card with enhanced security technology
- Door magnets
- CCTV
- Biometric access control
- Anchoring therapy units
- Key safe



Organisational measures

- House rules
 - Third party workers
 - Visitors
- Job descriptions
- Access control policy
- Screening
- Enhancing awareness
 - Use of physical security measures
 - Compliance
- Training and education



Future challenges

- Awareness of threats and risks by all involved
- Instruction & education
- Compliance with security procedures
- Preparedness
- Security plan
- Cont(r)act with local police

