# Security of radioactive sources in the UMC Utrecht

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### Content



- UMC Utrecht
- Enhancing security
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  - Critical processes
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  - Security
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## **UMC Utrecht**



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



## **Security facts**



#### Every year

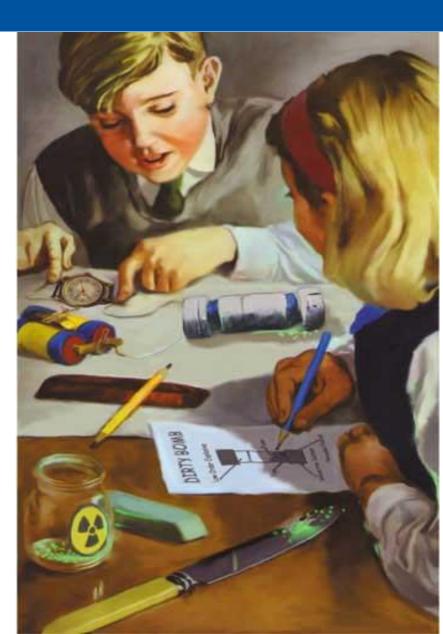
- 200 notifications of theft/ loss
- 6700 doors not locked properly
- 90 persons behaving suspiciously
- 30 denials of admittance



# **Security project**



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



## **Sources**



- 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



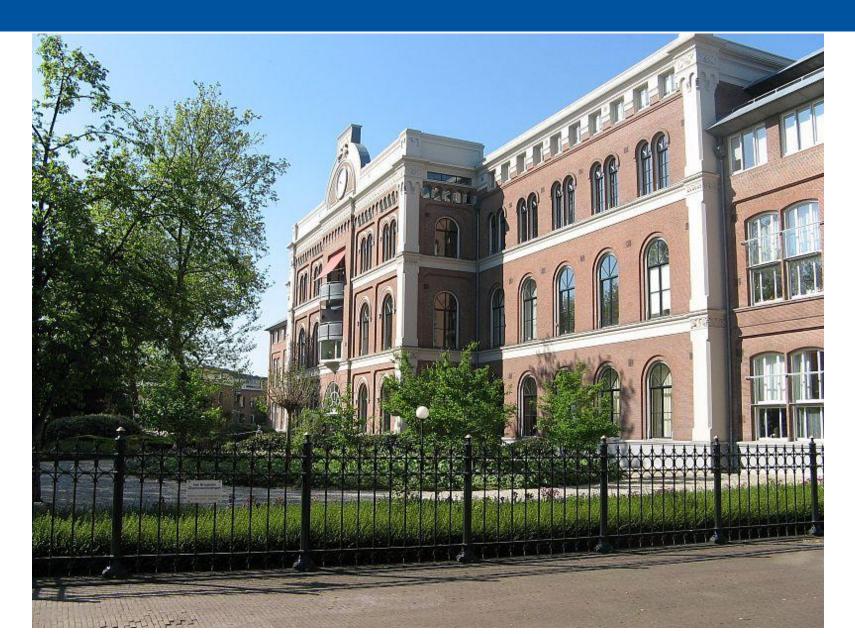
### **Threats**



- 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

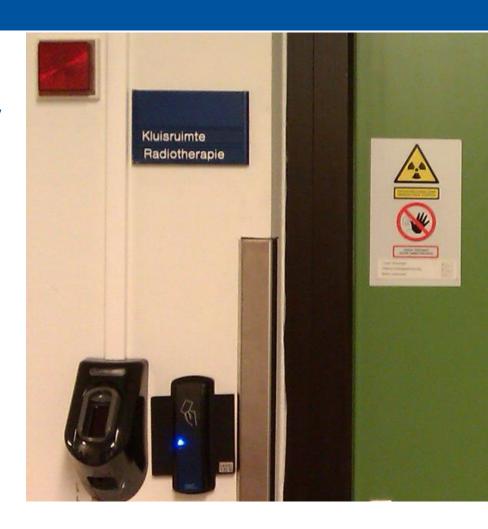


## **Improvements**



#### Physical security measures

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



## **Improvements**



#### 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

