



Health  
Canada

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*Your health and  
safety... our priority.*

*Votre santé et votre  
sécurité... notre priorité.*

# Federal Nuclear Emergency Preparedness and Consequence Management



Canada 

# Federal Nuclear Emergency Plan

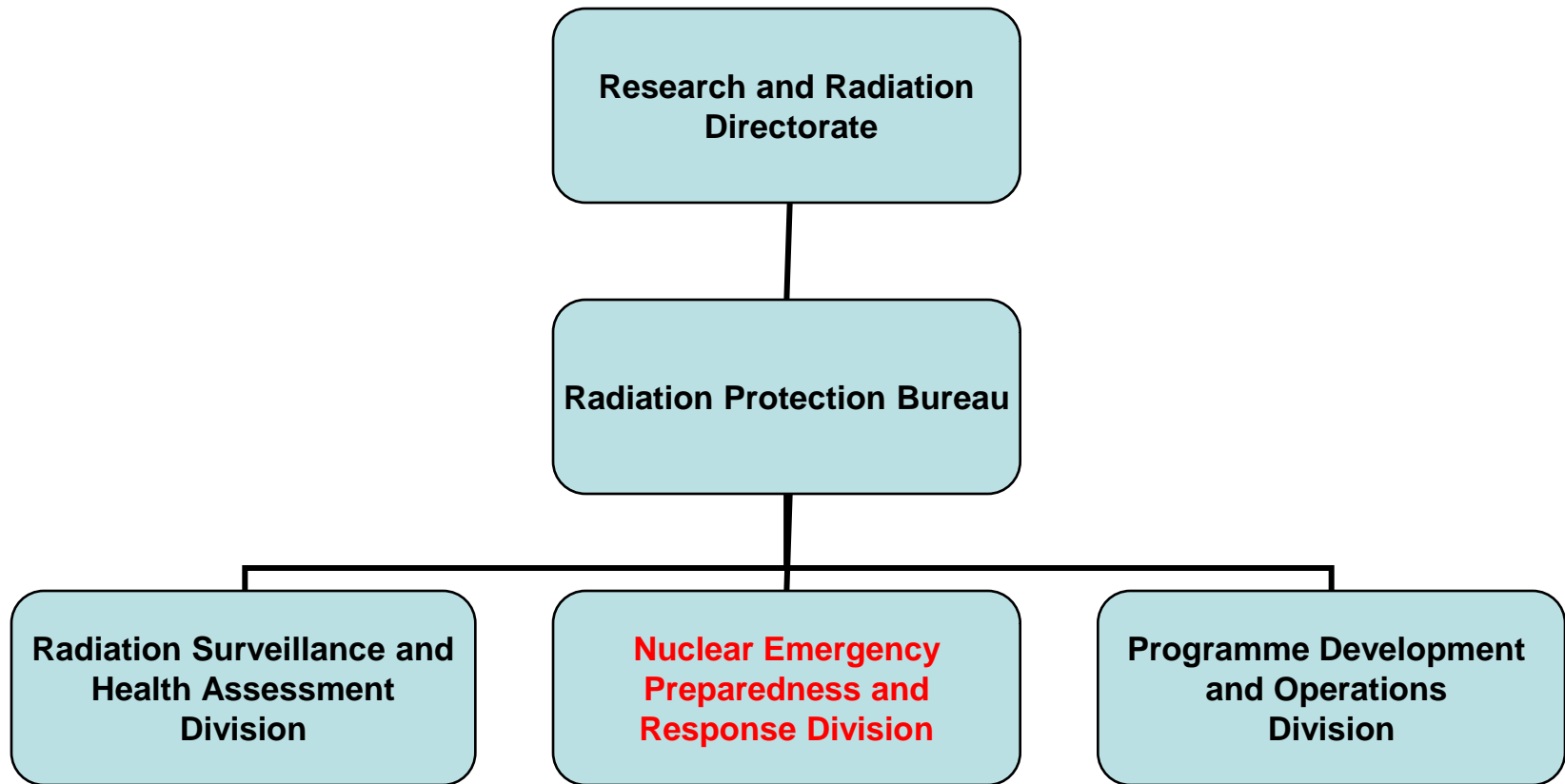
- FNEP - Mandated Authority; first version developed 1984

## Considerations :

- RN emergencies are low probability, (potentially) high consequence events
- RN hazard/impact assessment requires specialized tools and expertise
- Maintaining capability requires training, practice, and \$\$\$\$
- Developed an operational structure, defined SMEs and required skill sets which resulted in the FRAT (Federal Radiological Assessment Team)



# Health Canada's Radiation Program



# Federal Radiological Assessment Team

- Under FNEP, primary role = support to lead agencies for consequence management
- Increasingly: FRAT is recognized as a potential resource for national security and other response organizations:
  - Vancouver 2010 Olympic Games
  - Presidential visits
  - G8/G20

## Added Regional roles:

- Federal support to First Responders on R/N emergencies
- Regional support centre for R/N emergencies, with mobile nuclear laboratory, portable radiation detectors, portal monitors, dosimeters,....



# Winter Olympics Vancouver 2010



# Winter Olympics Vancouver 2010

- Integration with the National CBRNE Response Teams



## Main Tasks: Pre-Games

- Technical advice to RCMP regarding RN surveillance strategy & equipment
- Equipment procurement
- Networks/data transmission: set up & testing
- Background characterization
  - gamma, neutron
  - swipes for contamination (alpha, beta, gamma)
- Planning and logistics
- Training and exercising



## Main Tasks: during the Games

- Supported and provided scientific/technical advice to the RCMP as requested, 24/7
- Analyzed samples for presence of radioisotopes
  - swipes from periodic contamination checks
  - materials collected by police teams
- Provided reachback to front-line police officers and EHO surveillance
- Conducted discreet radiation surveillance
- Provided training for police officers and EHO's
- Provided dosimetry for police officers





## Discreet Surveillance

Used a combination of deployment strategies and detector types

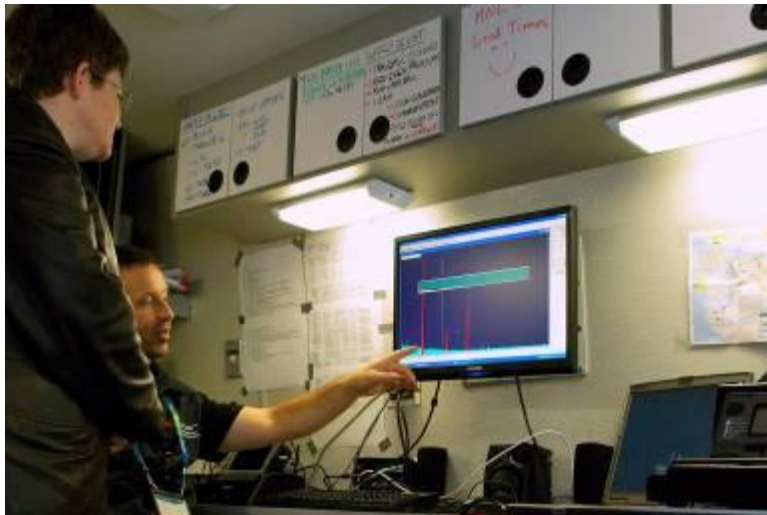
- Vehicle-borne detectors
- Hand-held detectors
- Fixed detectors
- Backpack detectors



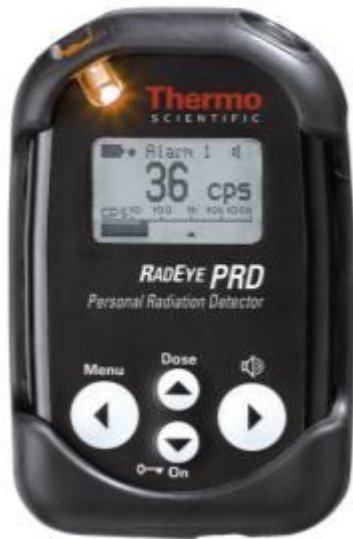
# Welcome to Science Town



## Sample Analysis – MNL



# Surveillance



## What did we see?

### Some highlights:

- Lots of nuclear medicine patients
- Rock in geology lab
  - Vehicle-borne survey
- X-rays
  - FP and hand-held detection and reachback
- Radioactive porta-potty
  - Hand-held detectors
  - Detection and reachback



**Thank you !**

