



Radon Action Plan of Finland

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Regulation background of Radon Actin Plan (RAP)

- Radiation Act (859/2018, 159 §)
 - Ministry of Social Affairs and Health will prepare
- Governmental Decree on ionizing radiation (1034/2018 54 §, Annex 6)
 - RAP includes radon exposure in dwellings, public buildings and workplaces due to ground and bedrock, building materials and household water
 - Updated every 5 year

RAP Content (1034/2018, Annex 6)

1. Long-term goals for radon exposure associated lung cancer reduction
2. Reference levels
3. Measuring
4. Mapping of indoor radon concentrations
5. Identification of buildings and areas with high radon concentrations
6. Remediation and prevention of high indoor radon concentrations
7. Risk communication

Process

- 2017: Stakeholder involvement and hearing
- 2018: **Steering group** of national authorities involved in radon regulation established
- 2019: Radon Action Plan will be published

Steering group of national authorities involved in radon regulation

Representatives

- Ministry of Social Affairs and Health (chair and the responsible body)
 - Health Protection, Environmental Health (governmental & regional)
 - Occupational Safety and Health (governmental & regional)
 - STUK (secretary)
 - National Supervisory Authority for Welfare and Health (Valvira)
- Ministry of Environment
- Association of Finnish Local and Regional Authorities

Organization of the regulation control of radon exposure

New buildings

Local building control /Ministry of Environment

Homes and buildings with public access

Local health protection authority /Ministry of Social Affairs and Health

Workplaces

STUK (+Occupational safety and health authority)

Household water

< quality requirement

Local health protection authority

> quality requirement

STUK

Radioactivity in building material, underground mines and quarries, waste containing radioactive materials

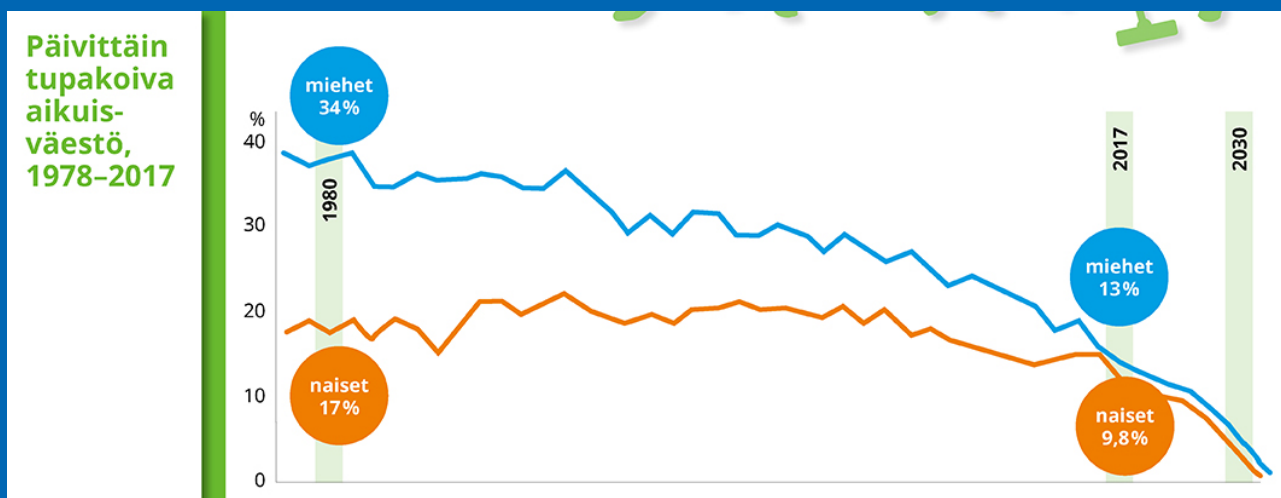
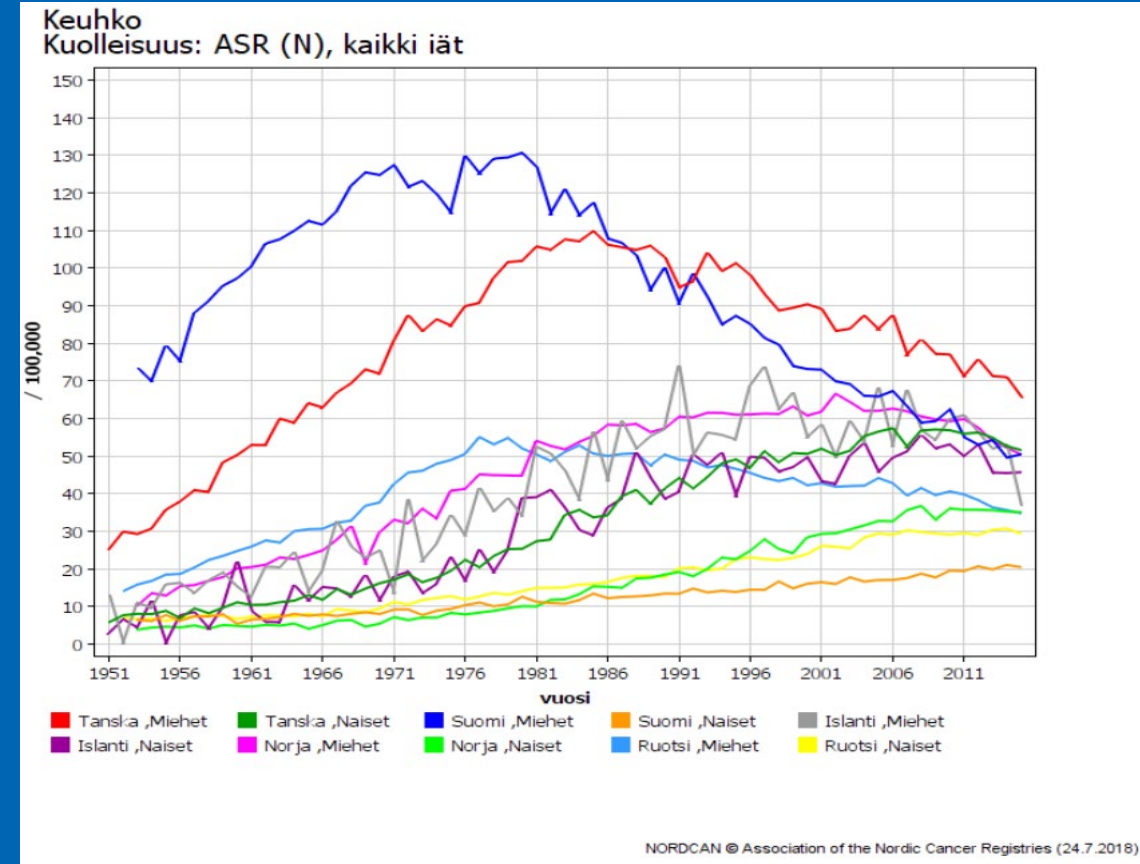
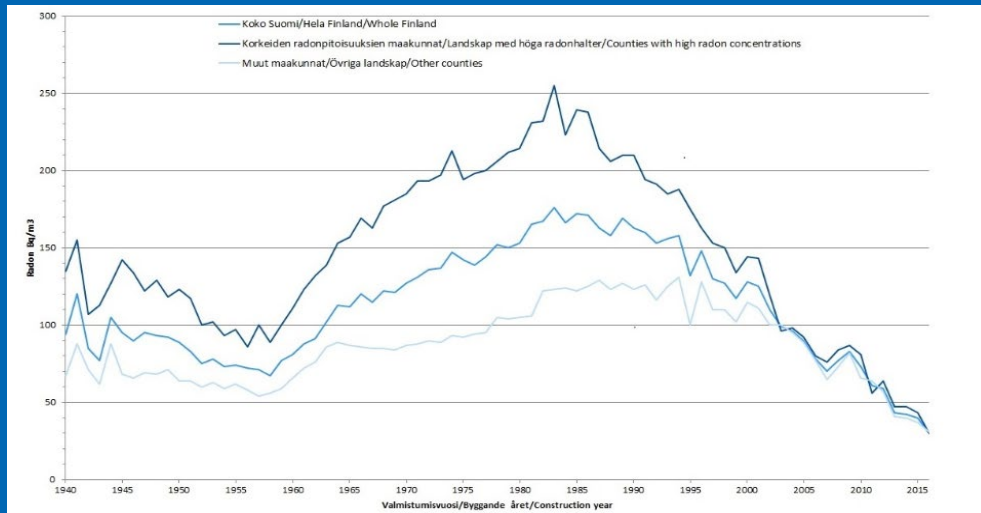
STUK



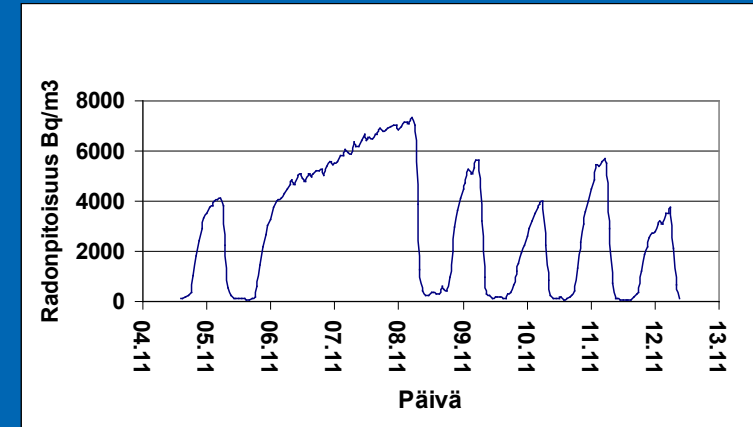
SÄTEILYTURVAKESKUS
STRÅLSÄKERHETSCENTRALEN
RADIATION AND NUCLEAR SAFETY AUTHORITY

| ****DRAFT**** <i>GOALS BY 2040</i> | HOW? | SOURCE OF INDICATORS |
|--|--|---|
| Lung cancer cases due to radon decreased | Radon exposure and smoking will decrease | Radon exposure: the national radon database and surveys Smoking habits: nationwide surveys Lung cancer cases: the Cancer Registry |
| Radon exposure will decrease in dwellings, places with public access, and workplaces | Radon mitigation in new buildings Remediation of existing buildings with high radon concentrations Regular radon measurements | Results from radon surveys in dwellings Results from targeted regulation control of radon in work places and buildings with public access |
| Indoor radon concentrations will be better known | Radon concentrations in dwellings in ground floor will be measured more often. Radon concentrations in work places and places with public access will be measured as stated in the Radiation Act. National radon database will be developed to be more comprehensive and accessible. | Indicators from the regulation control of radon in workplaces and places with public access Number of entries in the national radon database |
| Radon risk awareness increased | Effective and active communication to/ with all target groups | Radon risk awareness from surveys |

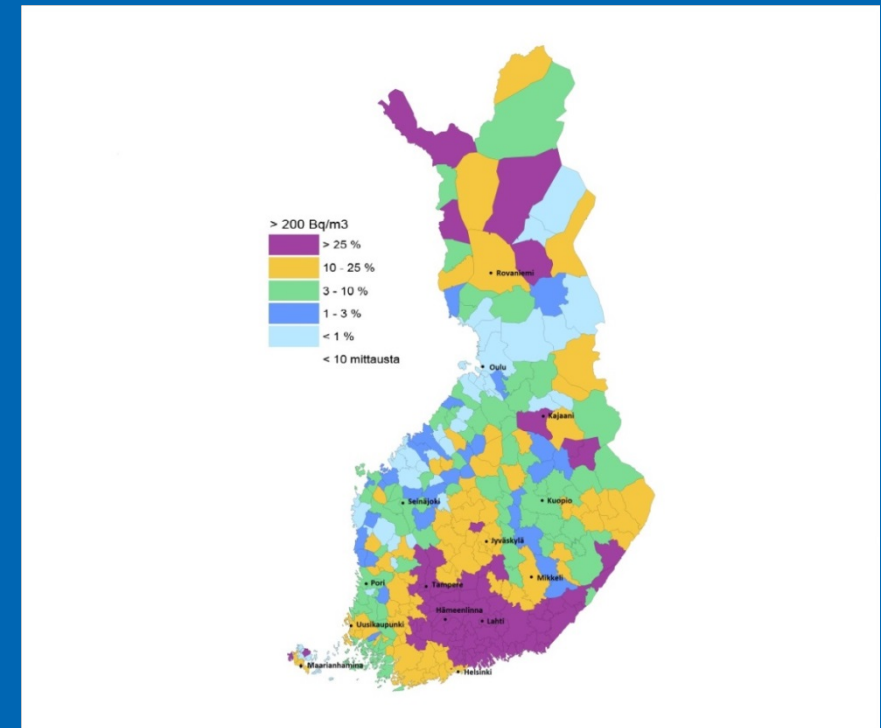
1. Long-term goals for radon exposure associated lung cancer reduction



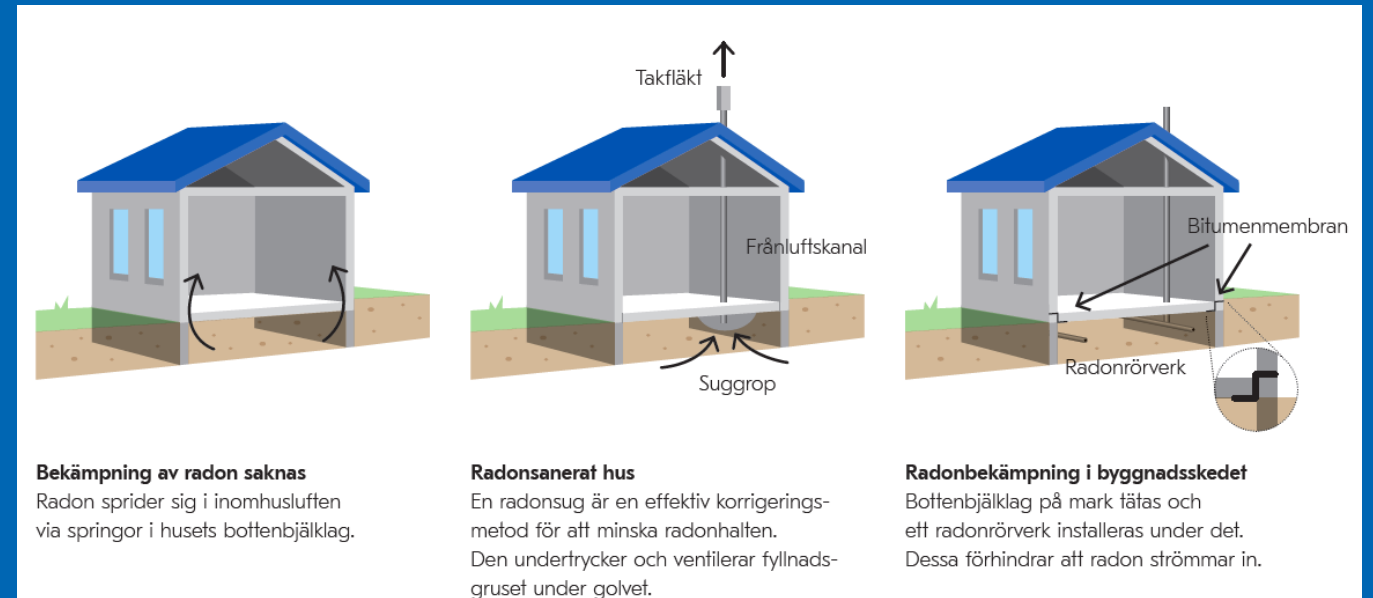
- Reference levels: 200 & 300 Bq/m³, 500 000 Bq h/m³/yr
- Measuring: >2 months during September-May, alpha track detectors, continuous monitors



- Mapping of indoor radon concentrations
- Identification of buildings and areas with high radon concentrations



6. Remediation and prevention of high indoor radon concentrations



7. Risk communication

