The Austrian Experience in Radon Risk Communication

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Austrian Agency for Health and Food Safety (AGES)

Organisation and legal basis

Owner
Republic of Austria, represented by
- Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK) and
- Ministry of Sustainability and Tourism (BMNT)

 Founded: 2002
Staff: >1,400

Radiation protection
Food security
Animal health
Medicines & medical devices
Public health
Food safety
Department Radon and Radioecology

**Tasks**

- Emergency preparedness
- Monitoring of the environment and foodstuff
- **National Radon Centre of Austria**
- Accredited laboratory

**Tasks:**

- Advising Ministry (EU-BSS)
- **Information, risk communication**
- Training and education
- Radon measurements (dwellings and workplaces)
- Austrian radon map, delineation of “radon areas”
Communicating Radon ...
...
in Austria

Task is not only informing the public but creating risk perception → which leads to action!

Austrian Radon Risk Communication Concept (2016)

- Overall goal: reduction of radon exposure in dwellings
- Situation in AUT - Information on target groups, communication tools
- List of possible activities
  - Estimation of efficiency (scope, impact, costs, invested time) for each activity → decision-making tool whether or not an activity is probably efficient
- Activities being implemented each year
- Future goal: implementation of the radon topic in the educational system

→ Communication with and between many stakeholders required!!
Radon Risk Communication Activities

Communication channels

Activities in progress:
- Short video clip
- 07.11.2019 – Radon Day: event for schools and universities
- Nov. 2019: Course for building professionals
- E-Mail inquiries
  radonfachstelle@ages.at

- Interactive radon map
- Website
- Radon FAQ
- Social media
- Radon Infoline
- Folders & brochures
- Courses for authorities

Monitoring of radon in the media
Situation in Austria
„The Good Radon“

Radon therapy & Radon in Spas

- Water supply for radon spas: very high radon concentrations can occur
- Outgassing of radon from healing water to the indoor air
  - Dose for patients negligible
  - Radon exposed workplace: dose estimation for workers required by law

- Opinion of many people: radon provides a health benefit!
World famous Gasteiner Heilstollen

Due to “Bad Gastein” and several other radon spas and health resorts, the general public opinion is that radon is “good”.

Source: www.gasteiner-heilstollen.com
Situation in Austria

„The Bad Radon“

~ 400 deaths caused by radon induced lung cancer per year in Austria!
Monitoring of Radon in the media

Situation in Austria

Media Statistics "Good vs. Bad Radon"
Radon measurements in dwellings

Measures to improve quality and increase number of measurements

- Ministry of Environment (BMNT) funds measurements in private dwellings, if
  - according to Austrian standards (6-months, questionnaire, protocol) and
  - agreement that data can be stored in national data base
- Funded by the ministry since 2014, online registration
- Info material, brochures, video for public

Number of measurements in Austria

- > 1800 households
- > 960 households
Radon measurements – Radon awareness

Experience in the province of Upper Austria

- **Free long-term measurements** in dwellings without basement
  - Funded by the province since 1997

Number of measurements – Province of Upper Austria
Radon measurements – Radon awareness
Experience in the province of Upper Austria

Long-term measurement **free of charge since 1997**

**Financial support** for

- **Remediation** → if radon level > 1,000 Bq/m³ → 20 % of remediation costs - max. 2,000 EUR
- **Prevention** (Radon drainage) → for new buildings in radon prone areas - 500 EUR

Number of funding applications for prevention measures – Upper Austria

- Financial support by the authority since 1997

Remediation

- **Only 15% of dwellings (above 400 Bq/m³)** asked for advice and support

Prevention in new dwellings

- **4,000 new dwellings per year**
- ~ 30/year with prevention
Financial support helps but not much change of behavior yet!

Risk communication = **cognitive aspect + emotional aspect** (Hevey et al. 2017\(^1\))

- People do not act rational about radon as a health hazard in their home
  - Emotions act as filters: \(\rightarrow\) Radon is natural, it’s always been there! \(\rightarrow\) People feel safe in their home!

- Suggestions:
  - Radon testing should be “normal” and visible
  - More regulation by the authority
  - Financial support + high quality and trustworthy information

Risk communication in Austria

- So far, mainly cognitive aspect addressed (providing measurement and information)

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Radon Information and Awareness video
Currently in progress..

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Dr. Hans-Peter Hutter
Doctor of Environmental Medicine
Experience and lessons learned

Radon communication strategy

Next step: opinion survey and evaluation of implemented activities

Special situation: promotion of health benefits in radon spas for a long time
  • “Good Radon” in spas vs. “Bad Radon” in dwellings → intensify communication

Financial support helps but needs thorough risk communication !!
  • More barriers than financial burden → emotional aspects need to be addressed

Risk communication is a time consuming process → regularly repeating the message over a long period of time

→ Still a lot of work to do to increase “radon awareness with action” in Austria !!!
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