Risks

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Accident with a radiation source

Threat assessment: An accident involving a radiation source in Estonia is unlikely. Compared to the previous assessment, the risk level has not changed.

Since Estonia regained independence, more than 35 radiation-related incidents have occurred – an average frequency of 2–3 incidents per year. These have mainly involved the discovery of ownerless radiation sources. Considering the hazards and their likelihood of materialising, there is no reason to believe that such events will become more frequent in the future.

No transport accidents involving the carriage of radioactive substances have been recorded in Estonia. Only one accident has occurred at a production enterprise processing radioactive isotopes during the observed period (in 1994 at a radioactive waste storage facility). Likewise, no significant incidents have been registered in medical institutions. The fall of a satellite or part of one from space is also considered a highly unlikely event.

According to data from the Environmental Board (as of 2024), the following are in use in Estonia:

- over 1,600 electrical radiation devices (mainly X-ray machines).
- over 480 devices using sealed radiation sources.
- over 200 open radiation sources (mainly used in medicine and science).

THREATS

- It is not possible to plan exactly for such an event, as an ownerless radioactive container could be discovered during excavation works at any location (including densely populated areas) and at an unforeseen time.
- A radioactive find could fall into the hands of people who are unaware that it is a radioactive source, or who, even if aware, fail to report it to the authorities. In such cases, ignorance or negligence may endanger their own life and health as well as that of others.

ACTIONS

- ✓ Regular exercises are held with partner institutions responsible for crisis management, and cooperation is being further developed.
- ✓ There is readiness both to activate a crisis information telephone line and to use EE-ALARM.

GUIDELINES

If you hear or see an official warning about a radiation hazard, then:

- ✓ Take shelter indoors immediately.
- ✓ Follow instructions provided through official channels.

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