



Netherlands Commission for
Environmental Assessment



Health in Environmental Assessment

Human health plays a key role in many types of planning. Consider, for example, the construction of a road, extensions to an industrial farm or plans for a new residential area. It is essential to take their implications for health into consideration from the start. This is where environmental assessment can help. An environmental assessment report describes the effects of a plan on the environment, nature and health, as well as identifying alternative solutions.

This fact sheet addresses the following issues:

- **Why is health featured in environmental assessment?**
- **When is health a concern in environmental assessment?**
- **What information needs to be included in an environmental assessment report?**
- **What methods are available to describe effects on health?**

Why is health featured in environmental assessment?

Attention to health aspects in an environmental assessment (EA) report is often secondary. Research tends to focus on whether an initiative complies with existing regulatory standards and emission (limits) thresholds, for example for air quality and noise.

And yet the impact on health may not be limited to these concerns, as health effects may also occur below regulatory standards. For example, an increase in noise pollution will lead to a rise in the number of people suffering from sleep deprivation.

A plan or project may also have positive effects on health – for example, adding green spaces or improving access to recreation areas. These positive effects often fail to get the attention they deserve.

Identifying health effects offers the opportunity to:

- involve health aspects in the decision-making process;
- optimise plans and projects;
- prevent negative effects;
- gather support for plans and projects.

When do health issues become relevant in environmental assessments?

It is important to pay attention to health in projects such as:

- major infrastructure projects, such as the building of roads, railways and airports;
- designating new residential areas, in terms of both location and design;
- high-voltage power lines;
- industrial farming;
- wind farms.

What kind of information should an environmental assessment report include?

It all depends on the health risks associated with the plan or project and the level of detail at which decision-making takes place. A wide range of environmental aspects may have an impact on health. For example, the effects of air pollution and noise nuisance are known. The relationship may be less obvious in the case of other environmental aspects, but the level of resulting social unrest may be considerable. The electromagnetic radiation produced by high-voltage masts would be a case in point. Supplying information about health effects may contribute to a transparent discussion and decision-making process for such projects.

Policy frameworks

The environmental assessment report describes actual preconditions for the project, based on relevant health policies.

In the EA report, describe the implications of the plan or project for:

1. the current health situation (reference situation) of the residential and biological environment, based on air quality, noise, smell, external security, etc;
2. the quantity and situation of homes and other sensitive locations in the area;
3. the implications of the plan for the residential and biological environment (wherever possible, indicate this on contour maps);
4. translate this into impact on health, if possible based on dose-effect relationships;
5. is cumulation an issue? health effects reinforce each other when occurring side by side. For example, a combination of air pollution and noise nuisance.

Research alternatives and measures

Explore alternatives and measures that may prevent or limit health effects. For example, by selecting the location of homes and schools to minimise negative effects of air pollution and noise, or by installing 'deaf facades'. Select a location that offers ideal access to green areas or take measures to improve access to these areas, for example by building a bridge.

What methods are available to describe effects on health?

Various methods are available to measure effects on health. It is important to determine which method is best suited to each individual project.

Methods vary from qualitative to (extremely) quantitative. Selection and utilisation of a method are dependent on the (decision-making) stage of the project, the available data and the level of detail for both the information and the environmental aspects involved.

People should always be at the heart of the assessment (think of deciding on the exact location of homes or identifying sensitive locations). Looking at information from a health and hygiene perspective is therefore highly recommended. For more information, please contact your Local Health Authority (GGD) or the National Institute for Public Health and the Environment (RIVM).

Examples of methods

Health impact screening (GES)

In this method, a GES score, colour and environmental health quality is ascribed based on the environmental burden. The score ranges from 0 (extremely good quality) to 8 (extremely poor quality).

Disability Adjusted Life Years (DALY)

DALY is a method of assessing a population's quality of life and loss of healthy years of life.



Health Guide in environmental assessment

The type of project and stage of the decision-making process partly determine the information required in the EA process. There are various methods of including health factors in environmental assessment and planning. The Health Guide (Handreiking Gezondheid) (<http://gezondheid.commissiemer.nl/>) offers guidance in selecting the right method and level of detail for the information, as well as suggestions for healthy alternatives and measures.

Do you have a question?

If so, please contact the Netherlands Commission for Environmental Assessment (NCEA); +31 (0)30 234 7666 kennisplatform@eia.nl or visit www.commissiemer.nl.

Contact

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