

## Distance to amenities in the Netherlands

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The availability of amenities such as schools and supermarkets is one main determinant for people in their choice of residence. This is especially important today when amenities might disappear in some areas due to population decline. In 2009 Statistics Netherlands has started to publish new statistics on the average distances to the nearest amenities for all residents in a local area, and the number of amenities that were reachable within a fixed distance. The statistics include information on all kinds of amenities that are important for everyday life such as:

- Health and welfare (e.g. GP's, hospitals)
- Retail (supermarkets and department stores)
- Hotels, restaurants and cafés
- Child care
- Education (primary and secondary schools)
- Traffic and transport (motor way access roads, railway stations)
- Leisure and culture (e.g. libraries, swimming pools)

### Method

The statistics are based on information of individual persons. For each inhabitant of the Netherlands the distances to the amenities are calculated with GIS technology. These distances are calculated along paved roads for use by cars and do not include cycle paths and footpaths. Ferry crossings are included. One-way traffic and other no entry regulations are only taken into account for national and provincial roads.

In addition to the average distance, the statistics also include information on the number of amenities in three different fixed distances. In theory every possible distance can be used, but a set of 6 is selected: 1, 3, 5, 10, 20 and 50 km. The used set varies per amenity. For primary schools the distances 1, 3 and 5 km were used, for hospitals 5, 10 and 20 km.

The statistics show results at the level of neighbourhoods and other regional areas. The Netherlands has 11.7 thousand neighbourhoods, ranging from 0 to 27150 inhabitants.

### Results

Below two examples demonstrate the kind of information that is available. A selection of the information is presented about secondary schools and hospitals.

#### Secondary schools

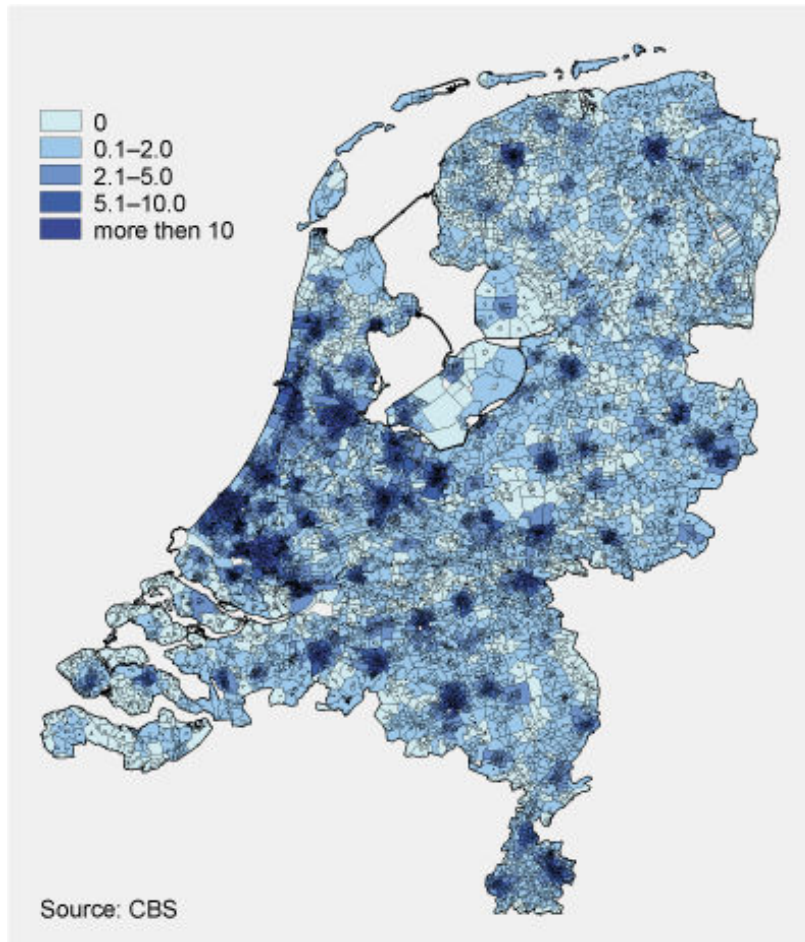
A secondary school is an important facility for all adolescents. The average distance for all Dutch residents to the nearest secondary school is 2.4 km. Nine in ten residents have at least one school within a 5 km distance.

Average distances vary widely per province. Pupils in the province of Zeeland have to cover the longest distance: on average they live 5.3 km away from the nearest school. The corresponding figures for pupils in the bordering province of South Holland, with the shortest distance, is 1.8 km.

Distances also vary considerably at neighbourhood level. In the small Junius quarter in the municipality of Delft, the average distance to the nearest school is only 85 metres, whereas pupils in the neighbourhood Westnieuwland in Goedereede have to travel nearly 250 times as far (21 km).

Nine in ten people in the Netherlands have at least one school for secondary education within a 5 km distance from their homes. Residents of the Willemspark area in Amsterdam could choose from as many as 37 schools within that distance. In one in five neighbourhoods, there is no single school for secondary education within a distance of 5 km; 10 percent of the Dutch population live in these areas.

## Number of schools for secondary education within a distance of 5 km



### Hospitals

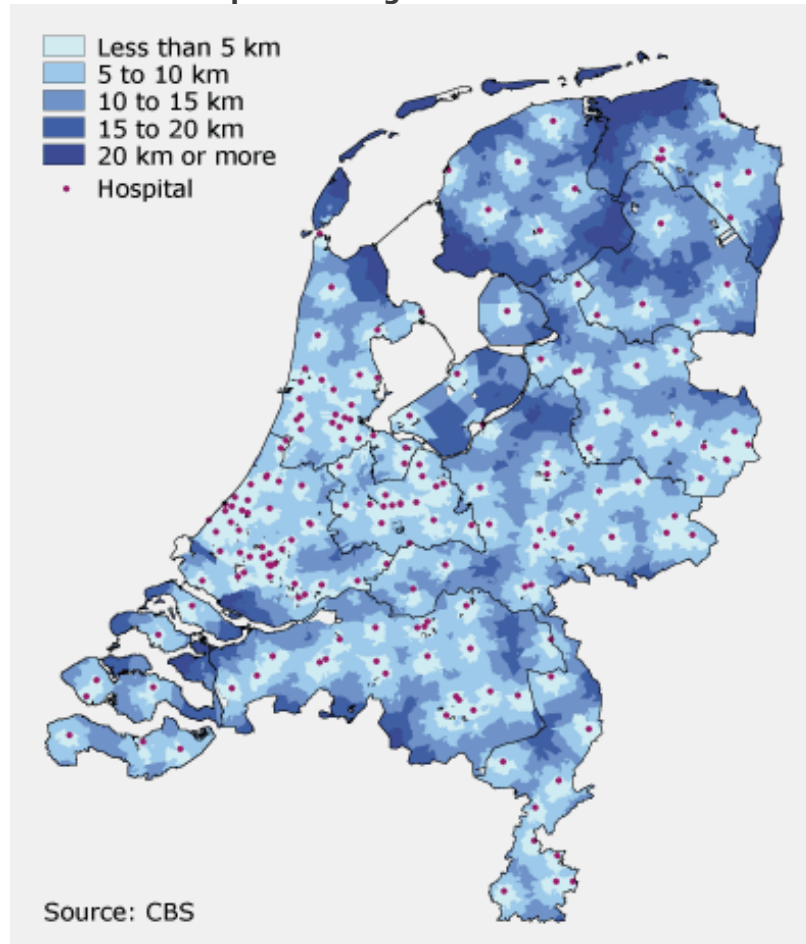
Health care should be provided for all residents. A considerable part of the health care, e.g. emergency care, is given at hospitals. The distance to the nearest hospital in the Netherlands is on average 5.1 km. More than six in ten people in the Netherlands live within 5 km from a hospital. The Randstad region has the highest hospital density, but the distance varies considerably per province. With an average of more than 9 km, residents of Friesland have to cover the largest distance to reach the nearest hospital. For residents of South Holland the average distance to the nearest hospital is less than 3.5 km.

On average residents of the Randstad region live very close to a hospital and have the widest variety of hospitals to choose from. In many neighbourhoods of Delft, there are 25 or more hospitals within a distance of 20 km.

One in ten people in the Netherlands can hardly choose which hospital they prefer to be treated, given by the distances. They live in neighbourhoods with only one hospital within a distance of 20 km. These neighbourhoods are mainly found in the northern part of the Netherlands and in the provinces of Flevoland and Zeeland.

With 44 km, people living on the eastern part of the Frisian island Terschelling have to travel the greatest distance to the nearest hospital. Part of that distance is covered by a ferry.

### Distance to hospital at neighbourhood level



### More information on availability of data

All the available data on distances to amenities on neighbourhood level can be found in StatLine, the electronic databank of Statistics Netherlands. It enables users to compile their own tables and graphs. The information can be accessed via [www.cbs.nl](http://www.cbs.nl), printed and downloaded free of charge.

At Statistics Netherlands the microdata will also be available for research under strict conditions. Several data can be combined, providing analyses for specific research questions. Policymakers, for instance, could analyse how far only the 12 to 18 year old children have to travel to the nearest secondary school, or the relationship between population decline and availability of amenities can be analysed. This may show whether important amenities for daily life remain available for all residents, taking into account that population decline may be a cause of the disappearance of amenities.