Context

This fact sheet series documents the magnitude of environmental health inequalities within countries in the WHO European Region.

Environmental health inequalities relate to socioeconomic, sociodemographic or spatial differences in exposure to environmental health risk factors and to differences in health status caused by environmental conditions.

The lack of a bath or shower in the dwelling fact sheet provides available data on the unequal distribution of hygiene amenities within countries in the Region, updating earlier assessments.

An overview of environmental health inequalities covered by the fact sheets and earlier assessments is available at: www.euro.who.int/en/EHinequalities

Inequalities in lack of a bath or shower in the dwelling

Key messages

1. Lack of a bath or shower in the home is a major challenge for many central and some south-eastern European countries.
2. Although it is less of a problem for western European countries, 0.6% of poor households have no access to a bath or shower in the dwelling.
3. Absolute inequalities between households above and below the poverty threshold are largest in central European countries, but have declined since 2010.
4. No consistent pattern of inequalities by single-parent versus all households can be observed across countries.

Lack of a bath or shower in the dwelling is linked to Sustainable Development Goals 3, 6, 10 and 11, and supports the identification of national challenges to "leave no one behind".
Environmental health inequalities are the differences in environmental health conditions between population groups. They can be quantified as absolute and relative inequalities.

Absolute inequalities are quantified by differences in the prevalence of a risk factor or disease between population groups (e.g. between poor and rich households). Relative inequalities, in contrast, are quantified as ratios between population groups.

To provide an accurate assessment, absolute and relative inequalities are equally important. The data in this fact sheet thus aim (when possible) to provide information on both measures.

Further information on defining and assessing environmental health inequalities is available from WHO’s Environmental health inequalities resource package (1).

To provide an overview and compare inequality conditions by geopolitical subregion, countries were grouped into four subregions to provide population-weighted subregional averages (Table 1). Countries with available data are shown in bold.

### Table 1. European subregions used for the assessment

<table>
<thead>
<tr>
<th>Subregion</th>
<th>Coverage</th>
<th>Countries included</th>
</tr>
</thead>
<tbody>
<tr>
<td>Euro 1 (21 countries)</td>
<td>All countries belonging to the European Union (EU) before May 2004 and western European countries at comparable developmental level</td>
<td>EU countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden Non-EU countries: Andorra, Iceland, Monaco, Norway, San Marino, Switzerland, United Kingdom</td>
</tr>
<tr>
<td>Euro 2 (13 countries)</td>
<td>All countries joining the EU after May 2004</td>
<td>Bulgaria, Croatia, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia</td>
</tr>
<tr>
<td>Euro 3 (12 countries)</td>
<td>All countries belonging to the Commonwealth of Independent States, and Georgia and Ukraine</td>
<td>Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Ukraine, Uzbekistan</td>
</tr>
<tr>
<td>Euro 4 (7 countries)</td>
<td>All countries that are part of the South-eastern Europe Health Network, and Turkey</td>
<td>Albania, Bosnia and Herzegovina, Israel, Montenegro, Serbia, North Macedonia, Turkey</td>
</tr>
</tbody>
</table>

Note: The EU-SILC data used for the indicator do not cover Euro 3 countries.

### Indicator data

The data source for this fact sheet is the European Union Statistics on Income and Living Conditions (EU-SILC) (2019 data), based on self-reported data from households on their housing and social situation (2).

EU-SILC defines lack of a bath or shower in the dwelling as not having a shower unit or a bathtub within the occupied dwelling. It is not required that the shower unit or the bath occupy a separate room. A bath or shower outside the dwelling is not considered sufficient.

**Indicator**

Lack of a bath or shower

**Description**

Population having neither a bath nor a shower in their dwelling

**Source and variable code**

EU-SILC: ilc_mdho02

### Inequality stratifications

To show inequalities within countries, prevalence data can be compared between population subgroups, stratified by:

- socioeconomic determinants (e.g. income, poverty, education or employment);
- sociodemographic determinants (e.g. age, gender, ethnicity or household type); or
- spatial determinants (e.g. place of residence).

Most data in this fact sheet rely on a comparison of prevalence of lack of a bath or shower in the dwelling: the proportion of people or households in a population with a particular exposure to lack of a bath or shower in the dwelling at a given time.

**Box 1** shows the inequality stratifications used in this fact sheet.

**Household type**

This fact sheet differentiates between single-parent households and the general population.

**Poverty**

Households are divided into those living at or above and those living below the poverty threshold of 60% of the national median equivalized income.
Status of inequalities in lack of a bath or shower in the dwelling

Introduction and health relevance

Although the quality of indoor environments across the WHO European Region has improved in recent years, a number of health risks remain related to poor hygiene linked to the absence of adequate sanitation facilities, including lack of a bath or shower. In 2016 in Europe, 537 deaths from diarrhoea in low- and middle-income countries and 1216 in high-income countries were attributable to inadequate hygiene behaviours (3).

It is also recognized that a lack of capacity for personal hygiene is associated with various other hand-transmitted illnesses, including pneumonia. Evidence from meta-analyses suggests that personal hygiene measures have the potential to reduce the risk of diarrhoeal disease by 23% (4), and that improvements in hand hygiene result in reductions of 21% in respiratory illnesses (5).

At least 5% of households in some countries in the Euro 2 and Euro 4 subregions lacked a bath or shower at home in 2019. Across the subregions, prevalence of lack of a bath or shower ranged from 0% in Germany to 22.8% in Romania (Fig. 1).

Notes: [a] full coverage with bath or shower; [b] latest available data for Iceland and United Kingdom from 2018. Source: Eurostat EU-SILC public access database (6) (latest update 1 July 2021).
Inequalities by poverty

Households below the relative poverty level more often lacked a bath or shower in 2019, except in Switzerland and Iceland – where prevalence among households above and below the relative poverty level was equal, and in Ireland – where households above the relative poverty level had higher prevalence (Fig. 2).

Ratios of prevalence between households below and above the relative poverty level were 6.9:1 in the Euro 2 and 6.2:1 in the Euro 4 subregion – these relative inequalities were higher than in the Euro 1 subregion (2.0:1).

Although the proportion of households below the relative poverty level without a bath or shower was much lower than in other Euro 2 countries, Slovakia had the highest relative inequality, with a ratio of 110.0:1. This indicates that households below the relative poverty level were 110 times more likely to lack a bath or shower than those above it, mostly as a result of the low proportion of households above the poverty level with no bath or shower (0.1%). After Slovakia, Croatia and Serbia had the highest relative inequality ratios, at 12.3:1 and 13.0:1.

Absolute inequalities were highest in the Euro 2 subregion, where the difference in prevalence of lack of a bath or shower in the dwelling between households below and above the relative poverty level was 18.5 percentage points. Romania had the highest absolute inequalities within a country, at 46.6 percentage points.

Although lack of a bath or shower at home was less of a problem for the Euro 1 subregion, 0.6% of households below the relative poverty level were still affected.

Fig. 2. Prevalence of lack of a bath or shower in the dwelling by relative poverty level (2019)

Notes: [a] full coverage with bath or shower in households above the relative poverty level; [b] latest available data for Iceland and United Kingdom from 2018; [c] income ratio 110.0:1. Source: Eurostat EU-SILC public access database (6) (latest update 1 July 2021).
**Time trend of inequalities by poverty**

In the Euro 2 subregion, where lack of a bath or shower at home is a major issue, prevalence rates among households both above and below the relative poverty level have decreased since 2010 (Fig. 3).

In these countries, absolute inequalities between households below and above the relative poverty level decreased from 22.6 percentage points in 2010 to 18.5 percentage points in 2019. Despite this progress – especially among relatively poor households – relative inequalities increased from 3.9:1 in 2010 to 6.9:1 in 2019.

In the Euro 1 subregion prevalence of lack of bath or shower in the home is low in general, and has decreased slightly over time. Absolute inequalities decreased from 0.6 percentage points in 2010 to 0.3 percentage points in 2019. The relative inequality ratio decreased from 2.7:1 in 2010 to 2.0:1 in 2019.

**Fig. 3. Time trend of prevalence of lack of a bath or shower in the dwelling by relative poverty level (2010–2019)**

Notes: no Euro 4 data available; Euro 1 figures for 2019 exclude Iceland and United Kingdom due to a lack of data.
Source: Eurostat EU-SILC public access database (6) [latest update 1 July 2021]
Inequalities by household type

Being a single-parent household is often an indicator of poverty and social disadvantage. No consistent pattern in prevalence of lack of a bath or shower emerged, however, for this household type across the subregions in 2019 (Fig. 4).

In 11 countries, the proportion of single-parent households living in a home without a bath or shower was higher than that of the general population.

Conversely, in 20 countries, the proportion of single-parent households living in a home without a bath or shower was lower than that of the general population.

The strongest relative inequalities were found in two Euro 1 countries – Sweden and Luxembourg – which had ratios of 6.0:1 to the disadvantage of single-parent households.

Fig. 4. Prevalence of lack of a bath or shower among single-parent households versus the general population (2019)
Conclusions and suggested mitigation actions

The inequality gaps between households below and above the poverty threshold lacking a bath or shower in the dwelling vary widely, up to an absolute difference in prevalence of 46.6 percentage points or ratios of over 10:1.

Households below the poverty threshold are the most disadvantaged; however, improvements in access to a bath or shower in the dwelling have occurred since 2010 in the Euro 2 subregion. Absolute inequalities have decreased, whereas relative inequalities have increased.

Although lack of a bath or shower at home is less of a problem for the Euro 1 subregion – especially in comparison to the Euro 2 subregion – 0.6% of households below the relative poverty level are still affected.

The pattern of inequalities between single-parent households and the general population is not consistent: single-parent households are more disadvantaged than the general population in some countries, while in others the opposite is true.

Suggested mitigation actions are:

- ensuring that all new residential buildings have a bath or shower in each dwelling;
- promoting public housing programmes that provide affordable housing (including social housing and affordable private rentals) to encourage accessibility to adequate housing for the most vulnerable groups, such as households below the relative poverty level;
- providing targeted financial support for vulnerable groups to facilitate access to affordable housing with a bath or shower;
- establishing national rehabilitation programmes for existing buildings without a bath or shower and implementing targeted public interventions and grants for such renovation;
- considering regulations that require owners of rented dwellings to establish adequate hygiene amenities.

References


Further reading on the subject is available at: https://www.uni-bremen.de/en/who-collaborating-centre-for-environmental-health-inequalities
The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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Authors
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WHO European Centre for Environment and Health
Platz der Vereinten Nationen 1
D-53113 Bonn, Germany
Tel: +49 228 815 0400
Fax: +49 228 815 0440
E-mail: euroceh@who.int
Website: www.euro.who.int

The full overview of environmental health inequalities covered by the fact sheets can be viewed at
www.euro.who.int/en/EHinequalities