Inequalities in lack of a flush toilet in the dwelling

Key messages

1. Lack of a flush toilet in the home is a major concern for many central and some south-eastern European countries.

2. Although it is less of a problem for western European countries, 0.8% of poor households have no access to a flush toilet in the dwelling.

3. Absolute inequalities between households below and above 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 flush toilet 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”.

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 flush toilet 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
Methodological notes

Defining inequalities

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).

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 flush toilet in the dwelling as not having an indoor flushing toilet in the dwelling for the sole use of the household. A flush toilet outside the dwelling is not considered sufficient.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
<th>Source and variable code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of a flush toilet</td>
<td>Population not having indoor flushing toilet for the sole use of their household</td>
<td>EU-SILC: ilc_mdho03</td>
</tr>
</tbody>
</table>

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

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

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.
Status of inequalities in lack of a flush toilet in the dwelling

Introduction and health relevance

Although access to sanitation constitutes a basic human right, it remains a major public health challenge: around 2 billion people worldwide do not have basic sanitation facilities (3). In the WHO European Region, more than 31 million people lack access to basic sanitation, including 314,000 who still practise open defecation (4).

Low-income countries are most frequently affected by inadequate sanitation and hygiene (5). Beyond socioeconomic inequalities, the burden of inadequate sanitation disproportionately affects the most vulnerable populations, such as children. Lack of a flush toilet at home may cause potential health impacts such as diarrhoeal diseases (5).

Many households in the Euro 2 and Euro 4 subregions, but only a small proportion in the Euro 1 subregion, lacked a flush toilet in the dwelling in 2019. Across all countries, prevalence of lack of a flush toilet ranged from 0% in Iceland, Norway and Sweden to 24.2% in Romania (Fig. 1).

Notes: [a] full coverage with a flush toilet; [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 flush toilet, except in Iceland, Norway and Sweden, where coverage was full, irrespective of the relative poverty level. In Ireland and Switzerland, however, a small proportion of households above the relative poverty level lacked a flush toilet, but no households below the relative poverty level (Fig. 2).

Ratios of prevalence between households below and above the relative poverty level were 6.1:1 in the Euro 2 and 4.8:1 in the Euro 4 subregion, displaying higher relative income inequalities than the Euro 1 subregion (2.4:1).

Although the proportion of households below the relative poverty level without a flush toilet was much lower than in other Euro 2 countries, Slovakia had the highest relative inequality, with a ratio of 30.0:1. This indicates that households below the relative poverty level were 30 times more likely to have no flush toilet, mostly as a result of the low proportion of households above the poverty level without a flush toilet (0.4%). After Slovakia, Serbia (11.5:1) and Croatia (8.4:1) reported the highest relative inequalities.

Absolute inequalities were greatest in the Euro 2 subregion, with an average difference of 18.8 percentage points in prevalence of lack of a flush toilet between households below and above the relative poverty level. Romania had the highest absolute inequality within a country, at 46.4 percentage points.

While lack of a flush toilet in the dwelling was less of a problem for the Euro 1 subregion, 0.8% of households below the relative poverty level were still affected.

Fig. 2. Prevalence of lack of a flush toilet in the dwelling by relative poverty level (2019)

Notes: [a] full coverage with a flush toilet in households above the relative poverty level; [b] full coverage with a flush toilet in households below the relative poverty level; [c] latest available data for Iceland and United Kingdom from 2018; [d] income ratio 30.0:1.
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 flush toilet 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 23.4 percentage points in 2010 to 18.8 percentage points in 2019. Relative inequalities increased from 3.7:1 in 2010 to 6.1:1 in 2019.

In the Euro 1 subregion, prevalence of lack of a flush toilet was low and decreased further between 2010 and 2019. Absolute inequalities between households below and above the relative poverty level declined from 0.9 percentage points in 2010 to 0.5 percentage points in 2019.

Relative inequalities remained relevant in the Euro 1 subregion, although they decreased slightly from 2.6:1 in 2010 to 2.4:1 in 2019.

**Fig. 3. Time trend of prevalence of lack of a flush toilet 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 flush toilet emerged, however, for this household type across the subregions in 2019 (Fig. 4).

In 10 countries, the proportion of single-parent households living in a home without a flush toilet was higher than that of the general population. Conversely, in 23 countries, the proportion of single-parent households living in a home without a flush toilet was lower than that of the general population. The strongest relative inequality was found in Malta, with a ratio of 17.0:1 to the disadvantage of single-parent households.

Fig. 4. Prevalence of lack of a flush toilet among single-parent households versus the general population (2019)

Notes: [a] full coverage with a flush toilet in all households; [b] full coverage with a flush toilet in single-parent households; [c] latest available data for Iceland and United Kingdom from 2018; [d] household ratio 17.0:1.

Source: Eurostat EU-SILC public access database (6) (latest update 1 July 2021).
The inequality gaps between households below and above the poverty threshold lacking a flush toilet in the dwelling vary widely, up to an absolute difference in prevalence of 46.4 percentage points or ratios of over 10:1.

Households below the poverty threshold are the most disadvantaged; however, improvements have occurred since 2010 in the Euro 2 subregion. Absolute inequalities have decreased, whereas relative inequalities have increased.

Although lack of a flush toilet in the dwelling is less of a problem for the Euro 1 subregion – especially in comparison to the Euro 2 subregion – 0.8% of households below the poverty threshold 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.

Conclusions and suggested mitigation actions

Suggested mitigation actions are:

• ensuring that all new residential buildings have a functional flush toilet 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 flush toilet;
• establishing national rehabilitation programmes for existing dwellings without a flush toilet 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

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Suggested citation:

WHO/EURO:2022-4869-44632-63329

This fact sheet was produced by the WHO Collaborating Centre for Environmental Health Inequalities

Layout and design: Imre Sebestyén/Unit Graphics

Acknowledgments
The WHO Regional Office for Europe would like to thank the following contributors:

Authors
Gabriele Bolte, Gesa Czwikla, Stefanie Dreger, Pia Hasselder and Birgit Reineke (WHO Collaborating Centre for Environmental Health Inequalities) for data compilation, analysis and content development
Matthias Braubach and Sinaia Netanyahu (WHO European Centre for Environment and Health) for conceptual design, data compilation and technical editing

This fact sheet was produced with the financial support of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection.