Health and environment scorecard

Brazil

### Extent of the problem

<table>
<thead>
<tr>
<th>Air pollution</th>
<th>WASH</th>
<th>Climate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x the WHO air quality guideline value for PM$_{2.5}$</td>
<td>13% of population without safe drinking water</td>
<td>Number of ‘warm spell’ days$^1$ in 2050 under a high emissions scenario$^4$</td>
</tr>
<tr>
<td>WHO Guideline (annual mean): 5 μg/m$^3$</td>
<td>50% of population without safe sanitation</td>
<td>152 days</td>
</tr>
<tr>
<td>Brazil annual mean: 11 μg/m$^3$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4% of population without clean fuels and technology for cooking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Health impact

<table>
<thead>
<tr>
<th>Air pollution</th>
<th>WASH</th>
<th>Climate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>15% of deaths from stroke and ischaemic heart disease caused by air pollution$^1$</td>
<td>45% of deaths from diarrhoea caused by unsafe drinking water, sanitation and inadequate personal hygiene</td>
<td>30x more heat deaths in 2050 compared to 1961-1990 period under a high emissions scenario$^4$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deaths per 100,000 people in the 65+ age group</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 heat deaths per year before 1990</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30 heat deaths in 2050</td>
</tr>
</tbody>
</table>

### Policies

<table>
<thead>
<tr>
<th>Air pollution</th>
<th>WASH</th>
<th>Climate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existence of legal standards for PM$_{2.5}$</td>
<td>Compliant with WHO Air Quality Guidelines</td>
<td>Existence of recent national assessment and plan$^5$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vulnerability and adaptation assessment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health National Adaptation plan (HNAP)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Climate resilient health systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sustainable low carbon health systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Net zero commitment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inclusion of health co-benefits in Nationally Determined Contribution (NDC)</td>
</tr>
</tbody>
</table>

1. Air pollution causes many other diseases and adverse health outcomes, stroke and ischaemic heart disease have been chosen for this country scorecard.
2. Operationalised as using safely managed drinking water and sanitation services.
3. A ‘warm spell’ day is a day when maximum temperature, together with that of at least the 6 consecutive previous days, exceed the 90th percentile threshold for that time of the year. The threshold is based on the period 1961-1990.
4. Analysis by the Climatic Research Unit, University of East Anglia, 2018.
5. Existence of a recent national assessment and plan refers to having conducted a climate change and health vulnerability and adaptation assessment and/or a health national adaptation plan (HNAP) since January 2020.
## Health and environment scorecard
### Brazil

### Extent of the problem

**Chemicals**
- International Health Regulations (IHR) capacity score for chemical events
  - IHR capacity score of 60% for chemical events
  - 40% not attained

**Radiation**
- International Health Regulations (IHR) capacity score for radiation emergencies
  - IHR capacity score of 80% for radiation emergencies
  - 20% not attained

**Occupational health**
- 39% of informal employment in total employment
- 3% of the working age population exposed to long working hours (≥55 hours/week)

### Health impact

**Chemicals**
- Less than 1 out of 100,000 children under five die from poisonings every year

**Radiation**
- 2 out of 100,000 people die from melanoma and other skin cancers every year
- 1 out of 100,000 people die from residential radon every year

### Policies

**Chemicals**
- Existence of legal limit on lead paint
- Existence of a poison centre
- Party to the Minamata Convention on Mercury

**Radiation**
- Existence of standards on electromagnetic fields
- Existence of regulation of artificial tanning devices/sun beds
- Existence of national radon regulations for dwellings

**Occupational health**
- Existence of programmes for occupational health and safety of health workers
- 2 of 3 key international labour conventions on occupational safety and health ratified

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6 Key informants report on attainment of a set of attributes for chemical events (core capacity 14) using a standard WHO instrument.

7 Key informants report on attainment of a set of attributes for radiation emergencies (core capacity 15) using a standard WHO instrument.
Health and environment scorecard
Brazil

**Extent of the problem**

<table>
<thead>
<tr>
<th>Health care facilities without basic services</th>
<th>Health care facilities without reliable electricity supply</th>
</tr>
</thead>
</table>
| **Water**
11%                                         | INSUFFICIENT DATA                                   |
| **Sanitation**
55%                                         | INSUFFICIENT DATA                                   |
| **Hygiene**
INSUFFICIENT DATA                         | INSUFFICIENT DATA                                   |
| **Waste management**
INSUFFICIENT DATA                         | INSUFFICIENT DATA                                   |

**Health impact**

**Climate assessment conducted for:**
- INSUFFICIENT DATA
- Climate resilience
- Environmental sustainability

**Existence of standards for WASH in health care facilities**
- INSUFFICIENT DATA

**Existence of standards for health care waste management**
- INSUFFICIENT DATA

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**References**

**Air pollution:** WHO global air quality guidelines 2021 • WHO SDG Indicator 11.6.2 Concentrations of fine particulate matter (PM2.5); 2019 data • WHO household air pollution data; 2019 data • WHO Air pollution data portal; health impact data for 2019 • UNEP 2021: Regulating air quality: the first global assessment of air pollution legislation; data for 2020 • WHO Household energy policy repository; data continuously updated. WASH: WHO, UNICEF: Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2022 data • WHO water, sanitation and hygiene: burden of disease, 2019 data • WHO GLAAS 2021/2022 cycle. 

**Climate change:** WHO Health and Climate Change Country Profiles • Honda et al. 2014 • Kendrovski et al. 2017 • WHO Health and Climate Change Global Survey • WHO: Alliance for Transformative Action on Climate and Health (ATACH): Country Commitments. • WHO 2023: Health in the Nationally Determined Contributions (in press).

**Chemicals:** WHO: International Health Regulations core capacity scores, 2022 data • WHO: Mortality rate attributed to unintentional poisonings; data for 2019 • WHO: Legally binding controls for lead paint, updated 2022.


**This scorecard is based on already published data (see references). It is a tool to measure and track the progress of Member States and is not intended for ranking.**