**Health and environment scorecard**

**Brazil**

### Extent of the problem

- **Air pollution**
  - 2x the WHO air quality guideline value for PM$_{2.5}$
  - WHO Guideline (annual mean): 5 μg/m$^3$
  - Brazil annual mean: 12 μg/m$^3$

- **WASH**
  - 14% of population without safe drinking water
  - 51% of population without safe sanitation

- **Climate change**
  - Number of ‘warm spell’ days$^3$ in 2050 under a high emissions scenario: 150 days

### Health impact

- 13% of deaths from stroke and ischaemic heart disease caused by air pollution$^1$

- 37% of deaths from diarrhoea caused by unsafe drinking water, sanitation and inadequate personal hygiene

### Policies

- Existence of legal standards for PM$_{2.5}$
  - Compliant with WHO Air Quality Guidelines
  - NO DATA

- Existence of national policy on household energy
  - NO DATA

- Existence of national health and climate change plan or strategy
  - NO DATA

- Financial resources available for implementation of national plans
  - Urban: 50%-75% of what is needed
  - Rural: <50% of what is needed

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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, exceeds the 90th percentile threshold for that time of the year. High emissions scenario RCP8.5 - Representative Concentration Pathway 8.5
4. High emissions scenario RCP8.5 - Representative Concentration Pathway 8.5

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### Health and environment scorecard: Brazil

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<th>Extent of the problem</th>
<th>Health impact</th>
<th>Policies</th>
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<tr>
<td><strong>Chemicals</strong></td>
<td><strong>1 out of 100,000 children under five die from poisonings every year</strong></td>
<td><strong>Existence of legal limit on lead paint</strong></td>
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<tr>
<td>International Health Regulations (IHR) capacity score for chemical events</td>
<td><strong>2 out of 100,000 people die from melanoma and other skin cancers every year</strong></td>
<td><strong>Existence of a poison centre</strong></td>
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<tr>
<td>IHR capacity score of 100% for chemical events</td>
<td><strong>5 out of 100,000 people of working age die from diseases due to occupational risks every year</strong></td>
<td><strong>Party to the Minamata Convention on Mercury</strong></td>
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<tr>
<td><strong>3%</strong> of the working age population exposed to long working hours (≥55 hours/week)</td>
<td><strong>13 out of 100,000 people of working age die from diseases due to occupational risks every year</strong></td>
<td><strong>Existence of programmes for occupational health and safety of health workers</strong></td>
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<tr>
<td><strong>46%</strong> of informal employment in total employment</td>
<td><strong>1 out of 100,000 people die from residential radon every year</strong></td>
<td><strong>Existence of standards on electromagnetic fields</strong></td>
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<td><strong>Radiation</strong></td>
<td><strong>2 of 3 key international labour conventions on occupational safety and health ratified</strong></td>
<td><strong>Existence of regulation of artificial tanning devices/sun beds</strong></td>
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<tr>
<td>International Health Regulations (IHR) capacity score for radiation emergencies</td>
<td><strong>25th</strong> of 33 countries in the region of the Americas</td>
<td><strong>Existence of national radon regulations for dwellings</strong></td>
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<td>IHR capacity score of 100% for radiation emergencies</td>
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</tbody>
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### References

- WHO global air quality guidelines 2021
- WHO SDG Indicator 11.6.2 Concentrations of fine particulate matter (PM2.5); 2016 data
- WHO household air pollution data; 2019 data
- WHO air pollution data portal; health impact data for 2016
- UNEP 2021: Regulating air quality: the first global assessment of air pollution legislation; data for 2020
- WHO Household energy policy repository; data continuously updated
- WHO water, sanitation and hygiene: burden of disease, 2016 data
- Honda et al. 2014
- WHO, ILO: Disease burden from long working hours, 2016 data
- WHO/ILO: Joint estimates of the work-related burden of disease and injury, 2016 data
- WHO: World directory of poison centres, updated 2021
- WHO: Deaths from melanoma and other skin cancers, 2019 data
- WHO: Deaths from residential radon, 2019 data
- WHO: Electromagnetic fields, updated 2018
- WHO: Legislation on artificial tanning sunbeds, updated 2021
- WHO: National radon regulations, 2019 data
- ILOSTAT: informal economy, updated 2022
- IHME: Deaths from residential radon, 2019 data
- ILO ratifications of C155, C161 and C187, updated 2021
- WHO: Mortality rate attributed to unintentional poisonings; data for 2019