Data Profile: Access to Healthy Assets & Hazards (AHAH) Version 3

Introduction

AHAH (the index of 'Access to Health Assets and Hazards') is a multi-dimensional index developed by the CDRC for Great Britain measuring how 'healthy' neighbourhoods are. Version 3 is updated including the most up-to-date data for 2022. AHAH (the index of 'Access to Health Assets and Hazards') is a multi-dimensional index developed by the CDRC for Great Britain measuring how 'healthy' neighbourhoods are. Version 3 is updated including the most up-to-date data for 2022.

Scale and Extent

Field	Value
Data Provider	Office of National Statistics (ONS), NHS England, NHS Scotland, NHS Wales, OpenStreetMap, Sentinel Satellite, Scottish Government, Local Data Company (LDC), Department of Environment, Food and Rural Affairs (DEFRA)
Analytical Units	LSOA 2011, Data Zone 2011
Data Format	csv
Temporal Extent	2022
Geographical Extent	Great Britain
Variables	61
Observations	41729

Citation Information

The following statement should be included when citing the use of this dataset:

 "The data for this research have been provided by the Consumer Data Research Centre, an ESRC Data Investment, under project ID CDRC [Project Number], ES/L011840/1; ES/L011891/1"

Data Classification and Access Summary

These data are classified as Open.

Content

The AHAH index combines indicators under four different domains of accessibility:

- Retail environment (access to fast food outlets, pubs, off-licences, tobacconists, gambling outlets),
- Health services (access to GPs, hospitals, pharmacies, dentists, leisure services),
- Physical environment (Blue Space, Green Space - Passive), and
- Air quality (Nitrogen Dioxide, Particulate Matter 10, Sulphur Dioxide).

Measurement data and deciles for the overall index, 4 domains and 14 inputs are produced for Lower Level Super Output Areas (LSOAs) for England and Wales, and Data Zones (DZ) for Scotland.

Novelty

We consider data from 14 health related indicators, measuring accessibility to types of retail services (e.g., fast food outlets, pubs, gambling stores), access to health services, air quality, and the extent of green and blue spaces.

Quality, Representation and Bias

The data are from multiple data sources. Each were selected following review since they presented the best quality or low bias data sources. We checked individual data sources for bias using local checks, however we did not find any issues. All external datasets are validated by their data producer as well.

Related Datasets

https://data.cdrc.ac.uk/dataset/access-healthy-assets-hazards-ahah-previous-versions

(Contains Version 1 and Version 2 of AHAH.)

Data Profile: Access to Healthy Assets & Hazards (AHAH) Version 3

Component Variables

Variable	Description	Domain	Country	Source	Date
lsoa11	Lower Super Output Area code (2011)	NA	England & Wales	ONS	2011
lsoa11	Data Zones	NA	Scotland	gov.scot	2011
ah3gamb	Distance to nearest **Gambling Outlet** (minutes)	retail	All	LDC	2019
ah3ffood	Distance to nearest **Fast Food Outlet** (minutes)	retail	All	LDC	2019
ah3pubs	Distance to nearest **Pubs/Bars/Nightclub** (minutes)	retail	All	LDC	2019
~~ah3off~~	~~Distance to nearest **Off licence** (minutes)~~ [REMOVED]	~~retail~~	~~All~~	~~LDC~~	~~2019~~
ah3tob	Distance to nearest **Tobacconists/Vape Store** (minutes)	retail	All	LDC	2019
ah3gp	Distance to nearest **GP Practice** (minutes)	health	England & Wales	NHS England	February 2022
ah3gp	Distance to nearest **GP Practice** (minutes)	health	Scotland	NHS Scotland	January 2022
ah3hosp	Distance to nearest **Hospital** (minutes)	health	England & Wales	NHS England	February 2022
ah3hosp	Distance to nearest **Hospital** (minutes)	health	Scotland	NHS Scotland	December 2021
ah3dent	Distance to nearest **Dentist** (minutes)	health	England & Wales	NHS England	January 2022
ah3dent	Distance to nearest **Dentist** (minutes)	health	Scotland	NHS Scotland	June 2021
ah3phar	Distance to nearest **Pharmacy** (minutes)	health	England	NHS England	January 2022
ah3phar	Distance to nearest **Pharmacy** (minutes)	health	Scotland	NHS Scotland	October 2021
ah3phar	Distance to nearest **Pharmacy** (minutes)	health	Wales	NHS Wales	November 2021
ah3leis	Distance to nearest **Leisure Centre** (minutes)	health	All	LDC	2019
ah3blue	Distance to nearest **Blue space** (minutes)	green/bluespace	All	OpenStreetMap	2021
ah3gpas	NVDI value indicating **Passive Green Space**	green/bluespace	All	Sentinel Satellite	2021
ah3no2	Annual mean **Nitrogen Dioxide** (μgm^3)	air	All	DEFRA	2019
ah3pm10	Annual mean **Particulate Matter** (μgm^3)	air	All	DEFRA	2019
ah3so2	Annual mean **Sulphur Dioxide** (μgm^3)	air	All	DEFRA	2019

AHAH Index, Domains and Intermediate Variables

Variable	Description	Domain
ah3h	Health Domain Score	health
ah3g	Green/Bluespace Domain Score	green/bluespace
ah3e	Air quality Domain Score	air
ah3r	Retail Domain Score	retail
ah3ahah	Access to Healthy Assets and Hazards index score	
ah3ahah_rnk[i]	AHAH Index ranked	
ah3ahah_pct[ii]	AHAH Index percentiles	

---

[i] All intermediate variables also include ranked values. For example, ah3gp_rnk is the ranking of the distance to nearest GP variable (ah3gp).

[ii] All intermediate variables also include percentiles. For example, ah3gp_pct is the percentile for the ranks of distance to nearest GP variable (ah3gp_rnk).