

# Air Quality Data: Middle East and North Africa

A regional snapshot derived from the OpenAQ report,  
Open Air Quality Data: The Global Landscape 2024

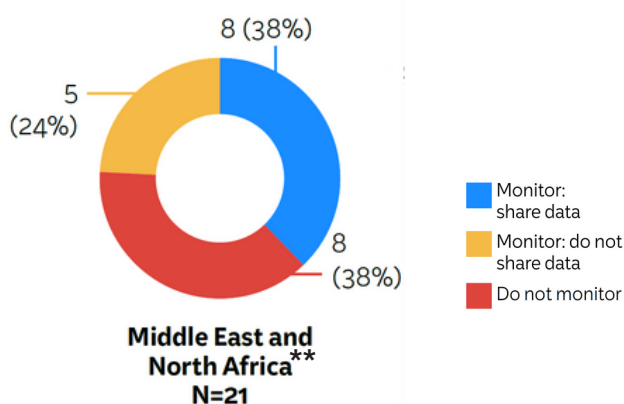
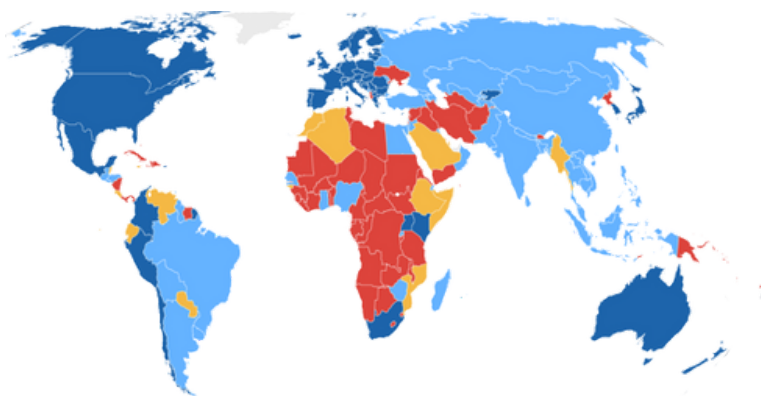
## The Importance of Air Quality Monitoring & Data Transparency

Air pollution is the **#4** leading risk factor for death and **#5** leading risk factor for disability-adjusted life years (DALY) in the Middle East and North Africa. (State of Global Air, 2024\*)

Measuring and tracking air pollution levels is critical to understanding and developing solutions to poor air quality. Governments that make air quality data open, easily accessible and freely available can leverage public, private and civil society expertise to build effective and durable approaches to solving the air pollution crisis.

## OpenAQ Examined:

1. Which countries are (and are not) actively monitoring air quality on a continuous basis?
2. To what extent are countries that are monitoring sharing the data they generate with the public?



\*\*Regional classification for countries according to the World Bank

## Criteria for Fully Open Data

- in physical units (an AQI alone does not suffice)
- with station-specific geographic coordinates
- at a daily or sub-daily frequency
- in a format that is machine-readable

## Monitoring & Data Sharing Status

We found evidence that 62% [N=13] of the 21 countries in this region are generating air quality data on a regular basis, and 38% [N=8] are not. Those countries without national-level air quality monitoring represent a combined population of 222 million.

38% [N=8] are publicly sharing their data, and 24% [N=5] are not.

Only Malta is sharing their data in a fully open, transparent manner.

## Changes to Monitoring & Data Sharing Since 2022

Djibouti began monitoring and sharing its air quality data. Morocco, Qatar, Algeria and Bahrain continue to monitor air quality. Israel, Jordan, Oman, Saudi Arabia, United Arab Emirates, Malta, Kuwait and Egypt continue to monitor and share their data publicly. Lebanon, Libya, Palestinian Territories and Syria continue to not monitor air quality. As of 2024, Tunisia, Iran and Iraq have all stopped monitoring air quality.

\* Based on 2021 data. "Air pollution" includes ambient  $PM_{2.5}$ , ambient ozone and household air pollution.

## Barriers

The most significant barrier to establishing a regular air quality monitoring program is resource constraints, such as a lack of financial resources and/or technical expertise. Governments must procure, operate and maintain the monitoring equipment; centralize and manage the data they produce (either building their own custom data management system or relying on private air sensor manufacturer platforms; analyze and use the data to inform actions; share the data; and communicate effectively.

Governments may not recognize the benefits of full data transparency: Open data increases public trust and cross-sectoral collaboration, leading to more innovative and evidence-based clean air solutions.

Since our last assessment in 2022, armed conflict has interrupted monitoring in Palestinian territories, and lack of technical support or funding for continued operation and maintenance has caused interruptions in Algeria.

## Opportunities

- Leveraging international expertise and partnerships can help overcome resource constraints.
- A global, stakeholder-led project is underway to develop an open-source data management system that governments can tailor to their needs.
- Social media offers a way to share air quality data.

## Bright Spots

Inter-country and local government monitoring efforts, as well as monitoring projects by non-governmental organizations (academic institutions, community-based organizations, civic groups and citizen scientists), are increasing.

## Recommendations

- All countries should measure air quality and share the data they generate in a fully transparent and accessible manner.
- Funders, such as development banks and philanthropies, should support less-resourced governments in their monitoring and data sharing efforts.

## About OpenAQ

OpenAQ is the world's first and largest open-source, open-access database of outdoor air quality measurements, built to ensure everyone has unfettered access to the data they need to analyze, communicate and advocate for clean air.

Read the full report here:

[link.openaq.org/2024GlobalLandscape](https://link.openaq.org/2024GlobalLandscape)

Access the full tally of countries here: [link.openaq.org/2024-ReportWorksheet](https://link.openaq.org/2024-ReportWorksheet)