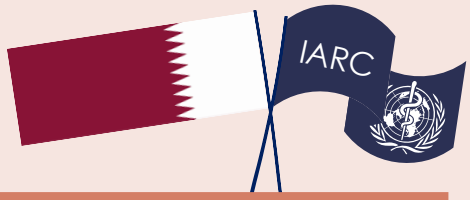
IARC Impact in practice series
The Qatar experience



> ***"Membership with IARC has supported cancer surveillance and research in Qatar primarily through access to technical guidance, international standards, and opportunities to engage in collaborative studies."*** **Representative from the Ministry of Public Health (MoPH) of Qatar**

Since becoming an IARC Participating State in **2013** - and the **first in the Gulf region** - Qatar has used membership not simply as a mark of affiliation, but as a practical instrument for strengthening cancer control. From the outset, the partnership combined **regional convening power, technical guidance and access to global scientific networks**: early engagement included hosting a high-level WHO-IARC meeting in Doha on cancer registration, prevention and screening priorities for the Eastern Mediterranean Region. Since then, Qatar has used IARC as a platform to connect national priorities to internationally recognised standards, comparative evidence and collaborative research infrastructures.

Why IARC membership made the difference for Qatar:

- **Global research connections that far exceed Qatar's size:** Between 2016 and 2026, Qatar co-authored 30 oncology publications with IARC, spanning 165 countries and 1,591 institutions. When IARC is involved, the median number of institutions per paper rises from 5 to 222 - by far the highest such collaboration intensity among Participating States - showing how IARC plugs Qatar into research infrastructures that would be impossible to build nationally.
- **Regional evidence that strengthens national planning:** IARC-coordinated analyses on the current and future cancer burden in the Gulf Cooperation Council (GCC) give Qatar a shared, comparable basis for anticipating future needs in prevention, early detection, diagnostics and treatment capacity.
- **Global standards translated into Qatar-specific prevention priorities:** Qatar has used IARC for practical policy prioritisation, most clearly through work on the risk characterisation of environmental carcinogens exposure in Qatar, applying *IARC Monographs* and burden-estimation methods to support action on exposure reduction and prevention.
- **Stronger surveillance, methods and credibility:** Through technical engagement on cancer registration, notification, screening and data quality, IARC has helped strengthen the quality, comparability and policy value of Qatar's cancer data, supporting better reporting and participation in international comparative studies.
- **Early Gulf leadership with regional spillover:** As the first Gulf Participating State, Qatar helped open the way for broader regional engagement with IARC, supporting shared approaches to cancer surveillance, prevention and evidence use across the GCC.

Part I. Scientific leadership through international collaboration

Exceptional intensity and depth of collaboration

Although Qatar's direct project portfolio with IARC remains limited, the collaboration that does exist is **highly integrated**: Qatar's participation is concentrated in **large, coordinated, multi-country studies**. The scale and intensity of this collaboration are reflected in the publication record:

- **Qatar has co-authored 30 oncology publications with IARC** during the last decade[1].
- These collaborations span **165 countries** and **1,591 unique institutions**, embedding Qatar in a genuinely global research network that would be difficult to assemble through domestic mechanisms alone.

Box #1: Cancer in Qatar: unmet needs in research and evidence

Based on **GLOBOCAN 2022** estimates, cancer represents a **major and growing public health challenge in Qatar**, with around **1,733 new cases** and **782 cancer deaths** each year, and nearly **5,888 people living with cancer within five years of diagnosis**. In a fast-changing population, demographic shifts and sustained exposure to **modifiable metabolic and lifestyle risk factors** mean this burden is expected to rise over time. This underlines the importance of embedding **stronger research, surveillance and evaluation** at the heart of Qatar's cancer-control strategy, so that prevention, early detection and service planning can be guided by robust, comparable evidence.

[1] Data derived from Web of Science records of IARC–Qatar co-authored papers published between January 2016 and January 2026.

> *"Being part of IARC's global network shows that Qatar is committed to internationally recognised standards in cancer registration and surveillance, giving greater confidence in the quality and reliability of the data produced by the registry."*
>
> Representative from the MoPH of Qatar

- When IARC is a co-author, the **median number of institutions per paper jumps from 5 to 222**, showing how IARC connects Qatar's research to exceptionally large multinational infrastructures. Although IARC collaboration is associated with greater international integration across Participating States, **Qatar stands out for having by far the highest collaboration intensity on this measure**.

A micro-topic snapshot of these co-authored publications shows a portfolio concentrated in **nutrition and obesity**, **screening disparities**, **maternal health equity**, **hypertension management**, **air pollution**, **metabolic syndrome**, and smaller clusters in **colonoscopy**, **telomere dynamics**, **clinical research ethics**, and **biliary diseases**. This thematic profile aligns with Qatar's prevention-relevant agenda in metabolic risk and upstream determinants of cancer and other Non-Communicable Diseases (NCDs).

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➔ Shaping the global cancer research agenda and standards

Qataris experts and diplomats help steer IARC's direction. Through seats on the **Scientific Council and Governing Council**, and active involvement in developing the Medium-Term Strategy (MTS), Qatar contributes directly to setting IARC's research and capacity-building priorities. This high-level engagement is a form of **soft power**. By shaping IARC's work programme, Qataris bring national and regional realities into global decision-making while gaining early insight into emerging priorities, methods, and partnership opportunities, aligning its own cancer plans and investments with cutting-edge international evidence.

Part II. From evidence to action: IARC's impact on national Public Health

➔ Evidence informing national policy and intersectoral action

In Qatar, IARC-linked evidence is already embedded in core national cancer policy. The **Qatar Cancer Plan (2023)** uses **GLOBOCAN** and other IARC-affiliated burden and projection analyses to frame the scale and profile of the national challenge, giving decision-makers an internationally comparable evidence base for setting priorities in prevention, early detection and service planning. The Plan also uses IARC-linked evidence to support a broader **whole-of-society prevention agenda**. By drawing on global analyses of primary prevention and the long-term impact of risk reduction, it places cancer control within a wider policy conversation on tobacco, unhealthy lifestyles and population health. In this way, IARC evidence helps position cancer not only as a clinical issue, but as a cross-government prevention challenge.

A further area of influence is **women's health and cervical cancer elimination**. The Plan cites major modelling work on HPV vaccination and cervical screening scale-up, using internationally benchmarked scenarios to support more integrated prevention pathways that connect immunisation, screening design and equitable

Box #2: Waterpipe tobacco: turning a regional blind spot into globally credible evidence

A concrete example of Qatar's value in IARC's high-integration collaboration model is **waterpipe tobacco**. Long widespread across the Middle East and North Africa and now growing in popularity in Europe, waterpipe smoking remains **poorly understood scientifically** despite its strong social appeal, weak regulation and persistent misconceptions that the water somehow makes it safer. Yet existing evidence already links waterpipe use, like cigarette smoking, to serious health outcomes including cancer.

To address this gap, Qatar is a collaborator in an **IARC-coordinated research project funded by the French National Cancer Institute (INCa) for 2024–2028**, conducted in partnership with **Sidra Medicine** and the **University of Manchester**. The project brings together epidemiology, clinical oncology and cutting-edge laboratory science to build a "molecular diary" of tobacco exposure, identifying the genetic and epigenetic changes associated with waterpipe and cigarette smoking and tracing how these changes contribute to carcinogenesis.

The project is ambitious in scope. It follows exposure from **pregnancy and birth** through to **adult life and cancer outcomes**, combining data from birth cohorts, adult population cohorts, lung-cancer patients and experimental models. By using harmonised epidemiological, clinical and molecular protocols across countries, it creates the kind of standardised multinational platform that no single institution could easily build alone.

For Qatar, participation means contributing national data to one of the first serious efforts to generate robust evidence on a **regionally important but globally understudied risk factor**.

Box #3: Qatar turns regional evidence into stronger national cancer intelligence

For Qatar, the clearest value of IARC collaboration is its ability to turn international evidence into stronger, more actionable national cancer intelligence. IARC has helped Qatar move from relying on regional and global estimates as reference points to building a more robust evidence base for national planning. This is especially important in a small, fast-changing population, where internationally comparable data are essential for credible decisions.

A first contribution has been to provide **shared Gulf Cooperation Council (GCC) burden evidence evidence**. IARC-coordinated analyses on the current and future cancer burden in the Gulf give Qatar a standardised planning baseline for anticipating future needs in workforce, diagnostics, treatment capacity and early detection. Rather than working from isolated national snapshots, Qatar can situate its trajectory within a common regional picture and use that evidence to support more forward-looking decision-making.

A second contribution has been to strengthen the **practical use of surveillance evidence**. Through technical engagement with Qatar's cancer registry and wider regional collaboration, IARC has helped reinforce the quality, credibility and comparability of national cancer data (see Part III). This has made it easier for Qatar to use registry outputs not only for reporting, but also for planning, benchmarking and participation in international comparative studies.

Qatar has also engaged directly with IARC on **environmental carcinogen exposure and risk characterisation**, using the **IARC Monographs** and related burden-estimation approaches as a reference framework to assess hazards, exposures and attributable cancer burden. This helps translate global evidence into practical cross-ministry action on environmental and occupational risk reduction.

implementation. Together, these examples show how IARC evidence helps Qatar move from broad strategic ambition to more targeted, evidence-based policy choices.

Part III. Building capacity for lasting impact

➔ Stronger data for better decisions

For Qatar, one of the clearest benefits of IARC membership has been stronger cancer surveillance capacity. Through the IARC-led **Global Initiative for Cancer Registry Development (GICR)** and regional collaboration with WHO EMRO and Gulf partners, Qatar has gained access to technical guidance, training and review mechanisms that help **align its registry with internationally recognised standards.** This has strengthened not only the technical quality of the data, but also their **credibility** and **usefulness** for research, planning and policy.

This support has gone beyond general capacity-building. An IARC country visit reviewed Qatar's registry operations, including case identification, notification pathways and data management. The recommendations from that review helped guide improvements in reporting, quality control and data completeness, and were taken into account in the revision of national cancer notification policy and procedures. This is a concrete example of how IARC technical advice has translated into better national surveillance practice.

Training has also been an important part of this capacity-building pathway. Members of the Qatar team completed the **Global Cancer Registrar Training programme** offered through the WHO Academy in collaboration with IARC, strengthening practical skills in case finding, coding standards, validation and quality assurance. Beyond the registry itself, this has helped improve understanding among senior managers and other stakeholders of how cancer data should be collected, interpreted and used.

> ***"During an IARC site visit, experts reviewed the operations of the national cancer registry. Their recommendations helped inform revisions to the national cancer notification policy, strengthening reporting responsibilities, completeness and quality control."***
>
> **Representative from the MoPH of Qatar**

Within the wider GCC framework, the **Gulf CDC in Riyadh** is being developed as a regional engine for registry strengthening and screening quality. For Qatar, this provides a route to benchmark national incidence patterns against peer countries, participate in collaborative analyses using harmonised data, and contribute to regional platforms such as survival studies and surveillance initiatives. Qatar's successful submission of national data to **SurvCan 4** illustrates how stronger standards and greater credibility can translate into participation in international comparative research.