Imagine a World,
Where People Breathe
the Same Air, Equally

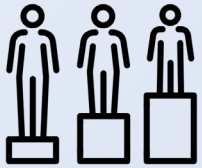
GO AQS

GLOBAL OPEN AIR QUALITY STANDARDS

Global Open Air Quality Standards (GO AQS)

What is GO AQS?

Equality



Equity

Universal

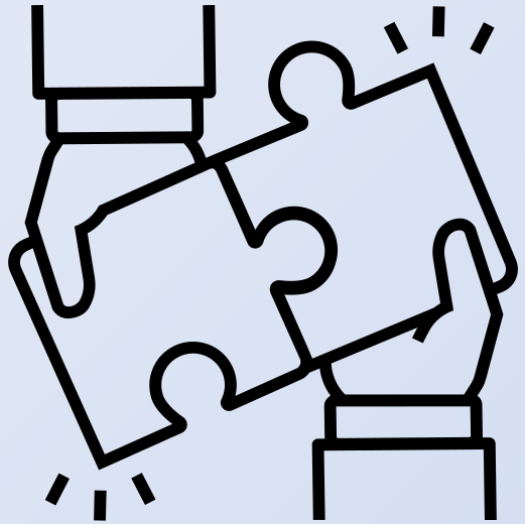
Health

Flexibility

Global Open Air Quality Standards (GO AQS)

What is GO AQS?

GO AQS is open and free which means that your organization or institution can contribute and adopt this new standard.

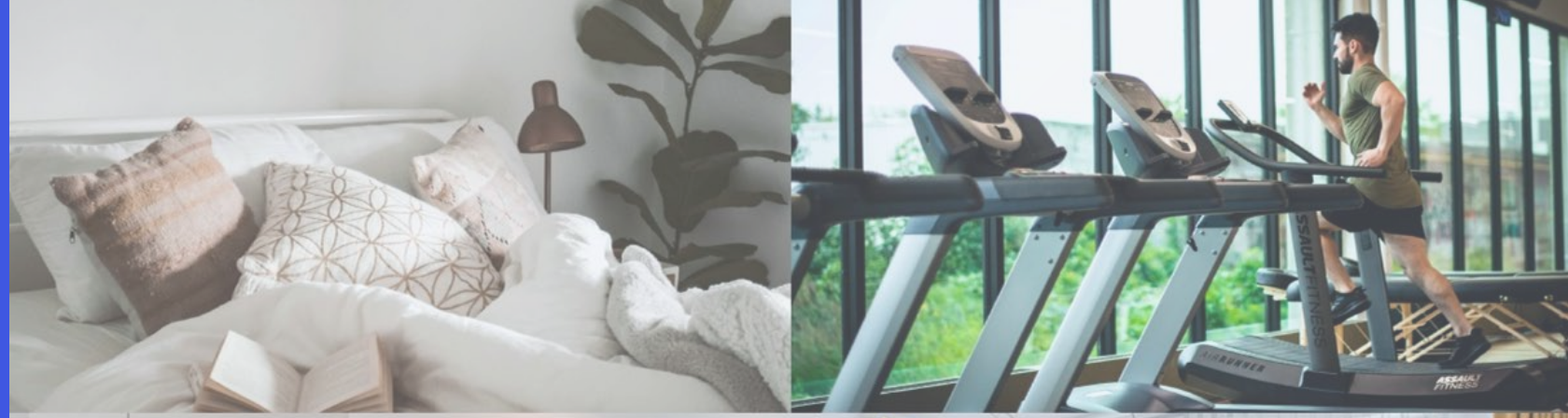


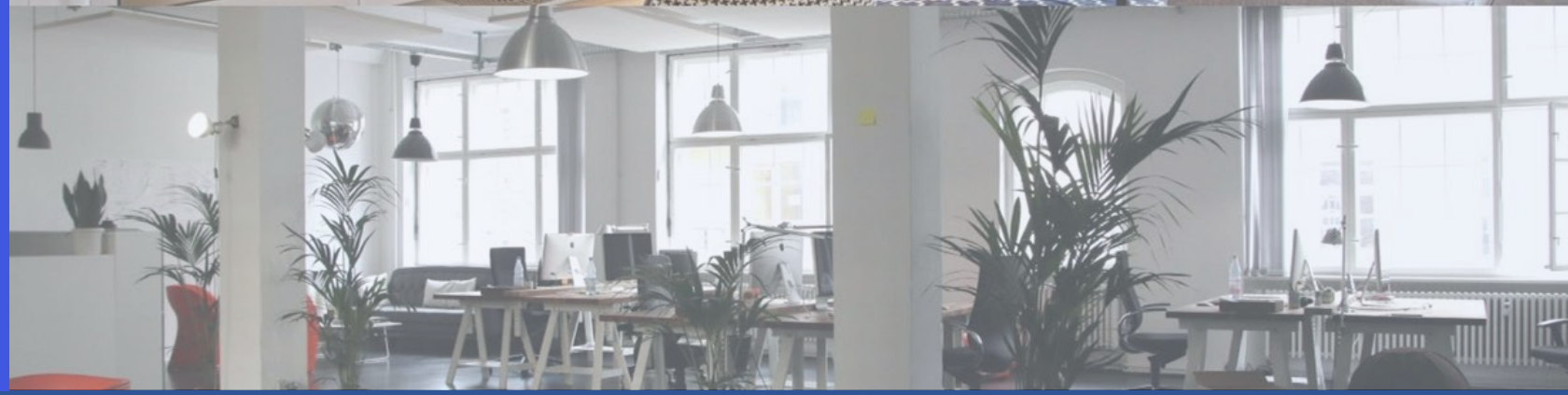
GO IAQS

A passion for Indoor Air

"The Canadian Lung Association strongly encourages all Canadians to test their homes and take action on radon. There is no safe level of radon exposure. You can't see it, taste or smell it, so it's important to know your radon number by testing. The risk of radon exposure that Canadians face is alarming and very concerning."

Terry Dean, president and CEO, The Canadian Lung Association.





Stronger Together

Global Open Indoor Air Quality Standards (GO IAQS)

Standards

VS

GO IAQS *Starter*

Provides accessible entry-level solution

GO IAQS *Ultimate*

Ensures top-tier performance & health

Global Open Indoor Air Quality Standards (GO IAQS)

Standards GO IAQS Starter

The Starter standard is a great first step for those who lack the resources for stricter protocols

GO IAQS Starter Guidelines	$PM_{2.5}$	CO_2
24-hour	25 µg/m^3	
Threshold		1000 ppm

Global Open Indoor Air Quality Standards (GO IAQS)

Standards GO IAQS Ultimate

The Ultimate standard was developed for buildings that want to offer ever higher performance and health protection to occupants

GO IAQS Ultimate Guidelines	$PM_{2.5}$	CO_2	O_3	CH_2O	CO	NO_2	Radon
1-hour	15 µg/m^3				31 ppm	106 ppb	
8-hour			51 ppb		9 ppm	21 ppb	
Threshold		800ppm		27 ppb			100 Bq/m^3

Global Open Indoor Air Quality Standards (GO IAQS)

Radon - Unit of Measurement

Becquerels per cubic meter (Bq/m^3) is the most commonly used unit of measurement for radon worldwide. It is the preferred unit in the International System of Units (SI) and is widely adopted by scientific and regulatory bodies.

Global Open Indoor Air Quality Standards (GO IAQS)

Radon - Limit

The radon reference level adopted by GO IAQS is set at **100 Bq/m³**, aligning with the recommendations from the WHO 2010 guidelines. It is crucial to understand that this value is a reference level, not a safety threshold. This designation implies that there is no level of radon exposure below which the risk of adverse health effects, particularly lung cancer, is entirely eliminated.

Global Open Indoor Air Quality Standards (GO IAQS)

Radon

	Unit of Measure	Threshold
Canada	Bq/m3	200
USA	pCi/L	4
Europe	Bq/m3	300
WHO	Bq/m3	100
GO IAQS	Bq/m3	100

Global Open Indoor Air Quality Standards (GO IAQS)

Air Quality Score (Index)

The GO AQS Score, aka AQI, is a measurement system that translates complex air pollution data into a user-friendly score

Description	Number Score	Letter Score	Health advice
Good	10 - 8	A	Ideal air quality - Enjoy activities.
Moderate	7- 5	B	Reduce sources of pollution. Cut back or reschedule strenuous activities indoors. Ventilate and/or filtrate.
Unhealthy	4 - 0	Z	Leave the room. Avoid all physical activities indoors. Wear N95/FFP3 masks and use personal or central air filtration systems in case of particle pollution or high carbon dioxide levels. Ventilate.

2024 Cross-Canada Radon Exposure Survey Overview

Project Overview:

- A multi-year study led by Evict Radon National Study team in collaboration with Health Canada, CAREX Canada, BC Centre for Disease Control, and other partners.
- Aim: Assess Canadian residential radon levels, and empower citizens with data for informed decisions

Key Aims:

- Estimate the proportion of Canadians exposed to radon levels less than or equal to 200 Bq/m3 (Canadian guideline) and less than or equal to 100 Bq/m3 (WHO guideline).
- Examine regional, community, and building type differences in radon exposure.
- Raise public awareness and provide actionable insights for policy and health decisions.

Important Findings:

- Radon levels at or above 200 Bq/m3:
  - 17.8% of Canadians
- Radon levels between 100-199 Bq/m3:
  - 24.2%
  - 83.6% of Canadian Census Divisions have at least one home with radon greater than or equal to 200 Bq/m3.
  - Survey conducted with high quality data from accredited tests (99.7% from 2009-2024)

Recent Research

A December 2024 review confirms a strong, high-quality link between indoor radon exposure and lung cancer. The GRADE (Grading of Recommendations Assessment, Development and Evaluation) approach was used to rate the quality of the evidence.

Data came from various locations across:
Europe: France, Great Britain, Italy, Norway, Poland, Spain, Switzerland, Finland, and Turkey.
North America: The United States and Canada.
Asia: China and South Korea.
Africa: South Africa.

Mphaga, K. V., Utembe, W., Mbonane, T. P., & Rathebe, P. C. (2024). Indoor Radon Exposure: A Systematic Review of Radon-induced Health Risks and Evidence Quality using GRADE Approach. Heliyon, 10(23), e40439. https://doi.org/10.1016/j.heliyon.2024.e40439

Global Open Indoor Air Quality Standards (GO IAQS)

Members

33 Countries

35 Academics

115 AQ Experts
Researchers
Industry

We share the same air let's share the same standards.

www.goaqs.org

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