

# QUALITY STANDARDS

## Asthma

### Race-Neutral Measurement of Lung Function Information for People Receiving Care

This document provides information for children, adolescents, and adults with suspected or confirmed asthma and their care partners about the use of race-neutral equations for measuring lung function.

**It is important to talk to your clinicians about how you can keep your lungs as healthy as possible.**



#### How is lung function measured?

Clinicians use a test called spirometry to see how well your lungs are working. The lungs are part of the respiratory system, the system that helps you breathe.

Spirometry is the most common test used to measure lung function and diagnose respiratory diseases such as asthma and chronic obstructive pulmonary disease (COPD), commonly referred to as emphysema.



#### How was race factored into lung function testing?

In the past, the results of spirometry (or lung function testing) have been “corrected” or “adjusted” in people of non-White races. This means that a person’s test results were changed using an adjustment factor or by applying a calculation related to their race or ethnicity.

This practice is rooted in racist beliefs dating back to the late 1700s. It was previously believed that the lungs of some racial or ethnic groups, especially Black people, had a different structure and biological functioning from the lungs of White people.<sup>1,2</sup>

Because of this, it has often mistakenly been thought that people of non-White races have better lung function and less severe asthma. This means that they might be diagnosed later and have more difficulty accessing appropriate care, benefits, and treatment (such as appropriate medications, specialized respiratory care, disability benefits, organ transplants, and other surgeries).



#### What has changed in the 2025 Ontario Health asthma quality standard updates to promote health equity?

In the [Asthma in Children and Adolescents](#) and [Asthma in Adults](#) quality standards, the definition of *spirometry* has been updated to align with a recent [American Thoracic Society statement](#) on the use of race and ethnicity in the interpretation of lung function tests.<sup>3</sup>

The updated definition recommends using a race- and ethnicity-neutral approach when measuring lung function. This means that your race and ethnicity should *not* be factored in when you receive a spirometry test.



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## **What does this change mean, and why does it matter?**

Using a race- and ethnicity-neutral approach to interpreting spirometry is an important step toward health equity (making sure people of all backgrounds have a fair opportunity to be as healthy as possible). It can help ensure that people from non-White races are not negatively affected when they have lung function testing.

Race-neutral measurement of lung function will promote more accurate and timely diagnosis of lung disease.

It will also help make sure that people from non-White races have fair and appropriate access to care, benefits, and treatment.

# References

- (1) Braun L. Race, ethnicity and lung function: a brief history. *Can J Respir Ther*. 2015;51(4):99-101.
- (2) Bhakta NR, Kaminsky DA, Bime C, Thakur N, Hall GL, McCormack MC, et al. Addressing race in pulmonary function testing by aligning intent and evidence with practice and perception. *Chest*. 2022;161(1):288-97.
- (3) Bhakta NR, Bime C, Kaminsky DA, McCormack MC, Thakur N, Stanojevic S, et al. Race and ethnicity in pulmonary function test interpretation: an official American Thoracic Society statement. *Am J Respir Crit Care Med*. 2023;207(8):978-95.

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