

# ASHRAE Standard 241 for Infection Control

A landmark method, born of the COVID-19 pandemic, that standardizes effective airborne infection control in buildings.

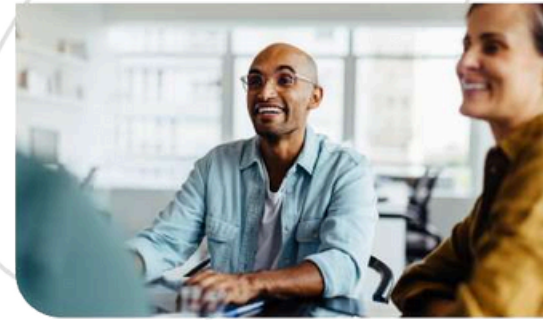
ASHRAE Standard 241-2023 provides the blueprint for every building to control airborne viral transmission indoors. Standard 241 sets requirements for an **equivalent clean airflow rate (target ECAi)** which measures the flow rate of pathogen-free air in occupied areas. Actual ECAi can be measured using the tracer particle method, as outlined in Appendix C. When using Poppy BreatheScore, the tracer particle method is automated, fast, and cost-effective.

## Building Types

- All existing buildings (regardless of age), new construction, and retrofits
- All residential and commercial buildings including single-family homes, multifamily, offices, retail, theaters, factories, schools, hospitals, public garages, and more
- All room types, from operating rooms and class-rooms, to offices and gyms

### Who is ASHRAE?

ASHRAE is an international organization of expert professionals focused on standards to promote building health and safety through research, technology, and best practices. Across 130 countries, ASHRAE publishes code-enforceable standards for building systems, energy efficiency, indoor air, refrigeration, and sustainability.



## Quick Definitions

**Equivalent Clean Air (ECAi)**—The per-person airflow rate of clean, pathogen-free air required to create low infection spaces. VECAi is the total airflow rate required in a space based on occupancy and typical use.

**Building Readiness Plan (BRP)**—Planning document required by each building that describes the engineering and non-engineering controls to be used to achieve equivalent clean airflow. Must be reviewed at least annually or when changes are made to engineering controls.

**Infection Risk Management Mode (IRMM)**—Building operating mode required by each building that determines the minimum baselines for clean air and airflow.

**Infectious Aerosols**—Tiny, exhaled particles that can carry disease-causing pathogens that can linger in the air for long periods. Applying this new standard reduces occupant exposure to airborne viruses while indoors, such as COVID-19, influenza, RSV, and other pathogens that result in damage to personal health and societal, economic challenges.