

Preface

How to protect public health, save energy and reduce climate change impacts — all at the same time

These Energy Savings Plus Health: Indoor Air Quality Guidelines for Multifamily Building Upgrades are part of EPA's approach to addressing three of our most pressing environmental and public health priorities: reducing asthma and other health disparities, our reliance on fossil fuels, and climate change impacts.

These guidelines will be a valuable tool in helping to ensure the health, comfort and safety of the many Americans living in multifamily buildings. More than 80 million Americans, about 25 percent of the U.S. population, live in multi-unit homes. About one-quarter of these residents live below the poverty line and a large percentage of residents of affordable housing are children, the elderly or disabled. These groups are the most vulnerable, and they are disproportionately impacted by diseases like asthma and commonly exposed to serious health risks from secondhand tobacco smoke, usually at home.

Heating and cooling buildings uses a lot of energy — about 43 percent of all energy use in the United States! Producing this energy requires us to burn fossil fuels like coal and oil, which contributes to air pollution and generates large amounts of greenhouse gases that contribute to climate change.

Improving the energy efficiency of buildings usually involves tightening the buildings through air sealing and other weatherization techniques to reduce the escape of air that we have just spent money to heat or cool. That's a very good thing. However, as buildings are renovated or repairs are made to save energy or increase comfort, indoor air quality problems can be created or exacerbated. Indoor pollutants like radon, mold, particles and chemicals from a variety of sources can build up to unhealthy levels unless pollutant sources, ventilation and moisture are carefully managed. Pollutants like tobacco smoke can easily migrate from one unit to another in multi-unit buildings, and lead and asbestos, which may be disturbed during renovations or retrofits, remain serious health risks in older buildings.

Protecting indoor air quality and occupant health while saving energy and money during building retrofits isn't very hard to do, but it does require teamwork, planning and commitment from everyone involved in building upgrades. Most importantly, if we do it right, we'll protect public health, reduce our reliance on fossil fuels and reduce climate change impacts all at the same time.

The guidance on these pages can help ensure that energy efficiency upgrades and other building renovations accomplish what they set out to do: provide safe, healthy, comfortable and energy efficient homes for all of us. Read it. Use it. Together, we can build a better future.



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