Indoor Air Quality and Public Health

WELLNESS INSTITUTE/HEALTH COUNCIL RECOMMENDATIONS

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Wellness Institute

- Serves as the local health council (state designation and funding)
- •Doña Ana County HHS is administrate support/backbone
- Community Foundation of Southern New Mexico is fiscal agent
- •Over 40 members local health care, social service, education and public health members



Policy Brief

Need for effective, evidence-based policy actions for improving indoor air quality.

- 1) Indoor air quality is a direct determinant of health and wellness that affects all aspects of physical, mental, and cognitive health; and
- 2) Improving indoor air quality is a necessary step toward stemming the spread of COVID-19.

Goals

Reduce the spread of COVID-19 while supporting economic, civic, and other social activities.

Improve overall health and wellness, especially for populations at most risk of poor health outcomes.

Improving Indoor Air Quality

Ventilation - intentional introduction of outdoor air into a building to control air contaminants

Filtration - removal of particles from the air by passing it through a filter

Recommended Action

- •Inspection and Standards. Follow indoor air quality standards developed by <u>ASHRAE (2021)</u> and require annual inspection.
 - **1.Ventilation**: The measure of air changes per hour (ACH) is used to quantify air flow. All buildings should meet a minimum standard 6 ACH.
 - **2.Filtration**: Use of MERV 13 or better filtration, with professional ongoing maintenance.
 - **3.Air Quality Monitoring**: Use continuous CO₂ monitoring to assure <1,000 ppm CO₂ or lower a.CO₂ monitoring should be required of all public and private businesses, government, and other indoor settings where people gather.
 - b.CO₂ readings should be publicly available in real time
 - c.CO_{2 r}eadings higher than 1,000 ppm must be mitigated immediately, and long-term mitigation measures put in place within 30 days.

Recommended Action

- Educate. Provide health-literate education about aerosol transmission of disease and appropriate mitigation measures. These measures should include:
 - **1.Masking:** People should be educated about how masking reduces the spread of COVID-19.
 - **2.Ventilation**: Information and training should be available about the importance of ventilation, including low-cost strategies for improving ventilation (e.g. opening windows and properly placing fans).
 - **3.Filtration**: Information and training should be available about the importance of air filtration, including instructions in why and how to build and use a "Do-It-Yourself" filtration device (i.e. Corsi-Rosenthal box).
 - **4.Assessing Risk**: Different situations pose different risks. All residents should have easy access to information about risks, which can help them to make informed decisions.

Recommended Action

- •Certification. All commercial indoor spaces should be required to publicly display air handling inspection certificate.
- •HVAC. All new buildings, should be required to have mechanical ventilation (HVAC) systems installed and operational. Systems should be inspected at least yearly by a certified professional.
- •Occupancy Rates. Occupancy rates should be based on the ability to appropriately ventilate indoor spaces. As more people enter a room, the amount of "rebreathed air" increases, increasing risk of virus particles reaching infectious levels.
- •Rental Properties. All rental properties should be held to standards for ventilation that maintain CO₂ levels at 1,000 ppm and air changes per hour (ACH) to 6 or more.
- •Transportation. Vehicles should be considered indoor environments for the purposes of air quality.

What You Can Do

- Voluntarily inspect and if need upgrade government buildings and transportation vehicles
- Allocate funds (ARPA) to incentives local business to do the same
- Advocate at the state level in support of policy recommendations and accountability
- Promote healthy indoor air quality education awareness and education campaigns