

## SB 1308 (Gonzalez) Ozone Safe Air Cleaners Fact Sheet

### Health Impacts of Air Pollution

Air pollution is a serious threat to health and disproportionately affects low-income communities and communities of color. Air pollution from things like cars, diesel trucks and equipment, industrial facilities, and wildfires can reduce immune function, lead to cardiovascular and lung diseases, and create long-term cancer risks. It can also worsen asthma, which affects roughly 4 million adults and 1.2 million children in the state. Multiple studies have shown an increase in emergency department visits for asthma, COPD, and other respiratory conditions during wildfire smoke events.

### The Important Role of Air Cleaners

Portable air cleaners, sometimes called air purifiers, can help reduce the impact of air pollution. In response to the growing threat of air pollution including wildfire smoke, schools, air districts, ports, healthcare providers, and other agencies across California have begun providing portable air cleaners to low-income Californians at-risk from exposure to outdoor air pollution, including people with asthma, pregnant women, older adults and children.

### Current Law

Unfortunately, not all air cleaners are safe. Mechanical air cleaners are safe and effectively filter out particles using

High-Efficiency Particulate Air (HEPA) or similar filters. Whereas, electronic air cleaners using ionizers, electrostatic precipitators, PCOs, hydroxyl generators and UV lights rely on technologies that can produce ozone or other byproducts harmful to health.

Researchers at the University of California, Davis recently released an in-depth report, commissioned by the California Air Resource Board, noting that: “compounds of clear concern are ozone, formaldehyde, and ultrafine particles, which were widely observed across studies from use of electronic air cleaners.”<sup>i</sup>

Because of the potential harms of some air cleaners, in 2006, AB 2276 (Pavley) directed the California Air Resources Board (CARB) to regulate portable indoor air cleaners for ozone safety. That law requires all portable indoor air cleaning devices sold in California to meet an ozone emission limit of 50 parts per billion (ppb).

### The Problem

New scientific research has demonstrated that even extremely low levels of ozone are associated with health impacts, including aggravating asthma, chronic bronchitis, and emphysema. A recent literature review

determined exposure to ozone at 5 ppb was associated with an increased risk for asthma-related emergency room visits and hospital admissions.<sup>ii</sup> As such, the state's ozone standard for air cleaners is no longer aligned with current scientific evidence.

In addition to the direct health risk posed by exposure to ozone emitted from electronic air cleaners, ozone poses additional risks as it is reactive with other common indoor chemicals which can lead to the formation of harmful byproducts.

### **The Solution**

The solution to this problem is to align the state's ozone standard for portable air cleaners with the current evidence about the harms of ozone exposure by directing CARB to reduce the allowable level of ozone emitted from air cleaners in California from 50 ppb to 5 ppb. This updated standard is feasible to implement because there is a new testing standard (UL 2998) compatible with existing state laboratories and certification procedures that can reliably detect ozone down to 5 ppb.

### **Support**

Regional Asthma Management & Prevention (Sponsor)  
Public Health Institute  
Alameda Alliance for Health  
American Lung Association  
Asthma and Allergy Foundation of America  
Breathe California  
California Alliance for Clean Air in Schools  
La Maestra Community Health Centers  
LifeLong Medical Care  
Natural Resources Defense Council  
Somali Family Service  
Zuckerberg San Francisco General Hospital Pediatric Asthma/Allergy Clinic  
U.S. Green Building Alliance  
Vision y Compromiso  
Watts Healthcare

A more stringent standard is supported in the UC Davis white paper where authors state, "While California already requires electronic air cleaners have ozone emissions less than 50 ppb, we recommend California further reduce ozone emissions from electronic air cleaners by requiring compliance with UL2998, a more stringent ozone emission standard of 5 ppb. This would reduce the allowable indoor ozone emissions by an order of magnitude which would provide a direct health benefit and subsequently reduce secondary formaldehyde and ultrafine particle formation that is driven by ozone chemistry."<sup>iii</sup>

### **This Bill**

SB 1308 would direct CARB to adopt regulations to protect public health from ozone emitted by portable air cleaners by reducing the allowable level of ozone emitted from no greater than 50ppb to 5 ppb.

The bill would direct CARB to adopt these regulations as soon as is feasible without requiring new resources, but no later than July 1, 2026.

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<sup>i</sup> White Paper: Air Pollutant Emissions and Possible Health Effects Associated with Electronic Air Cleaning Devices. Theresa Pistochini, Chris Cappa, University of California, Davis. 2023.

<https://ww2.arb.ca.gov/sites/default/files/2023-09/CARB%2022RD003%20White%20Paper%20Sept%2020%202023.pdf>

<sup>ii</sup> Zheng, X.Y., et al., Short-term exposure to ozone, nitrogen dioxide, and sulphur dioxide and emergency department visits and hospital admissions due to asthma: A systematic review and meta-analysis. Environment International, 2021

<sup>iii</sup> White Paper: Air Pollutant Emissions and Possible Health Effects Associated with Electronic Air Cleaning Devices. Theresa Pistochini, Chris Cappa, University of California, Davis. 2023